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THE UNIVERSITY OF ALBERTA

Motivations and Social Characteristics of Active Volunteers in Three Alberta Trail Organizations

by

Mary Jane Kreisel

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF Master of Arts in Recreation

Department of Recreation and Leisure Studies

EDMONTON, ALBERTA

Spring 1987

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To Phil

ABSTRACT

This research was undertaken to determine the social-psychological motives affecting volunteer participation and to describe other social characteristics of active core volunteers in three volunteer trail organizations in Alberta. These organizations were the Great Divide Trail Organization, the Trail North Foundation, and the Waskahegan Trail Association. It was also intended to assess the degree to which these volunteers perceived their volunteer activities as being leisure or non-leisure. This case study utilized a mail survey methodology. Eighty-seven people responded to the questionnaires out of a population of 110 subjects, yielding a 79.1 percent response rate.

With respect to socio-economic and demographic characteristics, trail volunteers tended to be middle aged, male and married, have higher than average incomes and were employed in professional, technical or managerial occupations.

A number of trends were exhibited in terms of volunteer motivation. In general, the findings indicated that the most enjoyed leisure activity and the most enjoyed volunteer activity were related in terms of having similar motivations for participation. Most volunteers chose trail construction and maintenance as their most enjoyed volunteer activity and outdoor recreation as their most enjoyed leisure activity. Both had high scores in terms of perceived freedom and intrinsic motivation and were therefore considered to be leisure. The least enjoyed volunteer activity scored low on perceived freedom and had a mixture of intrinsic and extrinsic motivation and was therefore considered to be non-leisure. Most volunteers chose administration as their least enjoyed volunteer activity. The results also showed that in general, volunteers felt enjoyment and perceived freedom when participating in six different volunteer activities. This indicates that most volunteer activities were considered to be leisure to volunteers even though some activities were more like leisure than others. The most important reasons for starting to volunteer and continuing to volunteer in the volunteer trail organization were a concern for the preservation of natural and historical resources and enjoyment of the outdoors and nature.

ACKNOWLEDGEMENTS

My father-in-law once told me that writing a thesis was like being in labour - it is a long and painful process but once it is finished, you quickly forget about the trials and tribulations! But before all is forgotten, I would like to acknowledge the generous contributions of the many people who assisted me in this study.

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I. STATEMENT OF THE PROBLEM

A. Introduction

The principal purpose of this research was to determine the motivations of active volunteers in three Alberta volunteer trail organizations. This has been done in the context of social-psychological and cognitive theories of motivation that are presently being applied to explain leisure and recreation behavior. Another purpose of this study was to examine the demographic and socio-economic characteristics of trail volunteers.

One of the main reasons for undertaking this research was based on the author's view that voluntarism is a leisure phenomenon that should utilize recognized social-psychological theories that have been generated in the leisure/recreation discipline and related fields to examine leisure behavior. At present, there is a dearth of research that has examined volunteer motivation in this manner and it is hoped that the approach used in this thesis has provided a more balanced perspective.

In addition, this research was undertaken for applied use by the volunteer trail organizations themselves. These volunteer trail organizations are the Great Divide Trail Association, the Trail North Foundation and the Waskahegan Trail Association. These organizations have played an important role in the provision of recreation services and facilities both to the community at large and to their own members. It was hoped that the results would provide greater understanding of the motivations and other social characteristics of the active members in these organizations and prove to be useful in future volunteer management.

B. The Problem, Subproblems and Propositions

The Problem

This research was undertaken to determine the social-psychological motives affecting volunteer participation and to describe other participation and social characteristics of core volunteers in three volunteer trail organizations in Alberta. It was also intended to assess the degree to which these active volunteers perceive their volunteer activities or experiences as being leisure or non-leisure.

The Subproblems

First Subproblem. To determine the leadership preferences, the social unit of participation and the amount of volunteer participation in the volunteer trail organizations.

Second Subproblem. To describe the socio-economic and demographic backgrounds of trail volunteers.

Third Subproblem. To determine the enjoyment and motivational elements of trail volunteer participation in six categories of activities usually found in volunteer trail organizations.

Fourth Subproblem. To determine the enjoyment and motivational elements of trail volunteer participation in three types of activities: most enjoyed trail volunteer activity, least enjoyed trail volunteer activity, and most enjoyed leisure activity.

Fifth Subproblem. To determine the relative importance of trail volunteers' reasons or motives for first starting to volunteer and for continuing to volunteer.

Sixth Subproblem. To evaluate information obtained from the third, fourth and fifth subproblems in order to describe the degree to which the trail volunteers perceive their volunteer activities or experiences as being leisure or non-leisure.

Propositions of the Study

Based on a review of the theoretical literature and past research in the area of motivation and voluntarism, the following propositions were formulated:

First Proposition. Volunteers will tend to most enjoy those volunteer activities and leisure activities that are more like leisure and involve direct contact with the outdoors or with historical or recreational events. These activities will show higher levels of perceived freedom and intrinsic motivation and will be more associated with self-interest motivations.

Second Proposition. Volunteers will tend to least enjoy those volunteer activities that are more like non-leisure and involve administrative or otherwise demanding duties or chores in the organization. These activities will show lower levels of perceived freedom and intrinsic motivation and will be more associated with altruistic motivations.

Third Proposition. The most enjoyed volunteer activities will tend to be related to most enjoyed leisure activities both in terms of the type of activity and the motivations for doing the activity.

Fourth Proposition. The reasons or motives for participation deemed most important to trail volunteers will be primarily intrinsically and self-interest motivated and will be connected with experiencing the recreational, historical or natural opportunities of the outdoors.

C. Methodology

A mail survey methodology, employing a self-administered questionnaire, was utilized in this study. The questionnaire was based on the findings of other studies and the design of other research instruments. A series of pilot tests was conducted prior to data collection in order to refine the questionnaire.

This research can also be considered a case study, since it sought to describe the social and motivational characteristics of a distinct population of subjects. Specifically, this population consisted of the activist volunteer core of the three volunteer trail organizations. This population, which was determined through a number of eligibility screenings, consisted of 110 active volunteers. A response rate of 79.1 percent of the population was obtained in the data collection which represented a total of 87 usable questionnaires.

The data were subjected primarily to descriptive analysis. In addition, chi-square tests, oneway analysis of variance tests, and factor analysis were run on the data. The SPSSx program was used for the statistical analysis.

D. The Delimitations

The study examined only those active volunteers in three volunteer trail organizations - the Great Divide Trail Association, the Trail North Foundation and the Waskahegan Trail Association. All of these organizations have their headquarters in Alberta.

The study sample consisted of the population of those volunteers in the *activist volunteer core*, which are defined as "those [persons] who consistently contribute their

time to the volunteer trail organization" (Curnan, Wong, and Peterfreund, 1979:117). It should be noted that the other members of these organizations who did not fall into this definition were not surveyed. These latter members actually number the majority of the membership of each organization.

E. The Definition of Terms

1. Activist Volunteer Core. Those persons who consistently contribute their time to the volunteer trail organization (adapted from Curnan *et al.*, 1979).

2. Altruism. Regard for others as a principle of action (McIntosh, 1952:35).

3. Expressive Associations. Voluntary associations that engage in activities which provide immediate gratification and affectual support for their members. The consequences of engaging in expressive activities are restricted solely to the participants themselves; attainment of the objectives has no effect on non-participants. In pursuing expressive ends, gratification is immediate, rather than deferred as in the case of instrumental activities. Some examples of this type of association are: interest and hobby groups, recreational clubs, and senior citizens groups (adapted from Edwards and Booth, 1973:2, Tomeh, 1973:94).

4. Extrinsic Motivation. Motivation that is determined and directed by a person's need for external rewards from the environment outside of the person. Extrinsic rewards can be both tangible (e.g. money, food, trophies, etc.) or intangible (e.g. praise, prestige, social status, etc.). (adapted from Deci, 1971; and Kreisel, 1982).

5. Instrumental Associations. Voluntary Associations whose activities are directed outside of the group of participants. Their objectives are instrumental in the sense that the activities pursued have functional consequences for some segment of the community, the community as a whole, or the larger society. These activities theoretically are a means to an end, and the participants derive gratification from the accomplishment of the goal and not the immediate situation. Some examples of this type of association are job-related associations, farmer organizations, business groups, labour unions, professional groups, Parent Teacher Associations, political organizations, and civic groups (adapted from Edwards and Booth, 1973:1-2; Tomeh, 1973:94).

6. Instrumental-Expressive Associations. Voluntary associations that incorporate both instrumental and expressive functions and activities; some of which are directed outside of the group of participants and others which are directed within. Participant gratification is also mixed. Some reinforcement is deferred, dependent upon the accomplishment of the ends; some gratification is immediate, deriving from involvement in expressive activities. Some examples of this type of association are: church-related organizations, fraternal service clubs, Masons and Legion groups (adapted from Edwards and Booth, 1973:2; Tomeh, 1973:94).

7. Intrinsic Motivation. Motivation that is determined and directed by a person's need for the internal rewards of feeling competent and self-determining in dealing with his/her environment. Two kinds of intrinsic motivation are evident: the first concerning itself with a person's need to avoid boredom and seek out stimulation

and challenge, the second involving the conquering of challenges or reducing incongruity. One of the major attributes of intrinsic motivation is that there are no external rewards - the reward is the satisfaction derived from doing the activity itself (Deci, 1975; Iso-Ahola, 1980; Neulinger, 1981).

8. Leisure. A mental construct which people tend to objectively describe as free time or non-work hours and subjectively associate with a state of mind or experience brought about by engaging (or participating) in a freely chosen activity, pastime or pursuit which is intrinsically rewarding to the person (based on Iso-Ahola, 1980 and Neulinger, 1981).

9. Perceived Freedom. A state in which a person feels that what he is doing, he is doing by choice and because he wants to do it. This state implies a lack of constraint or compulsion (Neulinger, 1974:15).

10. Trail Volunteer. A person who contributes his or her time and effort to the service of a non-profit organization dedicated to the preservation, management, maintenance and enjoyment of a specified trail or system of trails and related facilities (adapted from Curnan *et al*., 1979; Henderson, 1981(b); Lautz, 1979).

11. Voluntarism. Those activities of individuals, associations and agencies arising out of a spontaneous private effort to promote or advance some aspect of the common good, as this good is perceived by the person's participation in it (adapted from Manser and Cass, 1976).

12. Voluntary Associations. Organizations in which membership depends on the free choice of the individual while severance rests at the will of either party. Such groups, which may be large or small, are usually nonprofit in nature and are organized to pursue mutual and personal interests of the members so as to achieve common goals. Offices are filled by election or selection and periodic and/or frequent meetings are generally held at a regular meeting place. The units . . . are designated variously as formal groups, organizations, associations, clubs, societies, or special interest groups (Tomeh, 1973:92).

13. Volunteers. Individuals who give freely of their time and effort to an activity or service for primarily non-remunerative and non-coercive reasons (adapted from Henderson, 1981(b):208 and Smith, 1972:3).

Abbreviations

1. GDTA is the abbreviation for the Great Divide Trail Association.

2. TNF is the abbreviation for the Trail North Foundation.

3. WTA is the abbreviation for the Waskahegan Trail Association.

4. TDM is the abbreviation for total design method.

5. VTO is the abbreviation for volunteer trail organization.

The Importance of the Study

Voluntarism as a form of leisure time behavior is an important segment of North American lifestyle. The services of volunteers are extensively utilized by various institutions and non-profit voluntary associations within the leisure and recreation sector of society. Volunteer trail organizations may be classified as instrumental-expressive voluntary associations since they serve two types of objectives. Not only do they furnish leisure opportunities for their own memberships but they also serve the important role of providing outdoor recreational and heritage facilities and services to the public at large.

This study examines the characteristics of volunteers in three specific volunteer trail organizations (VTOs) in Alberta: the Great Divide Trail Association, the Waskahegan Trail Association and the Trail North Foundation. These organizations are briefly described in Appendix A in terms of their administrative status and their perceived mandates. In Alberta, these VTOs have a relatively recent history, but in the last 15 years, hundreds of miles of trails have been planned, built and maintained by these organizations in various areas throughout the province. In addition, these organizations have led countless recreationists on organized walks or trail rides and have staged or contributed to various major and minor events including slide shows, publicity talks, social events, hiking and backpacking seminars, commemorative ceremonies and conservation and heritage forums.

These organizations contribute in other important ways to the overall outdoor recreation system in Alberta. Most obvious is their ability to provide a recreational trail resource and related facilities at a low cost to the taxpayer. Trail organizations also have the important and unique ability of working within the interface of the private and public sector. Lautz (1979), an Executive Director of the Appalachian Trail Conference, notes that these organizations can develop and maintain grassroot contact with private landowners and government jurisdictions more efficiently and effectively than can

government agencies. Further, Lautz (1979) notes that trail organizations are not subject to the same fluctuating political decision making or economic cutbacks that often plague government agencies in charge of providing park and recreational facilities and services. As a result, trail organizations often provide much greater continuity of purpose in the development and management of a trail resource.

It is therefore evident that volunteer trail organizations provide an important contribution to the recreation and conservation sectors of society. Of major concern to this study is the driving force of the trail organization - the volunteer. This study was designed to examine these volunteers in order to discover their reasons for participating. Unlike an employee of a profit-making organization, a volunteer does not receive remuneration for his/her work and therefore, one would have to presume that he or she participates for other types of rewards or satisfactions. Some of these rewards may be tangible but it is likely that most are psychological in nature.

The main purpose of this study was to determine what motivates these volunteers and what rewards and satisfactions they receive from their various activities in the organization. These findings, coupled with information on other socio-economic and participation characteristics, can potentially provide a unique profile of the trail volunteer in Alberta. It was hoped that such a profile might provide an insight into the dynamics of trail voluntarism as well as voluntarism in general.

The information obtained can be of both practical and theoretical interest to the academic community and to the trail organizations. This research will add to the empirical knowledge base in a number of areas. With respect to voluntarism research, it will provide additional information in the sector of recreational voluntarism and more specifically, trail voluntarism. This will enable the making of comparisons between this sector and other sectors of voluntarism, particularly with regard to socio-economic background and participation characteristics. This study will also contribute to the social-psychological findings on motivation, particularly regarding the theories of

perceived freedom and constraint, intrinsic and extrinsic motivation, voluntarism motivations (self-interest and altruism) and the reasons for volunteer participation. Furthermore, the study may provide some insight into the place of trail voluntarism in the leisure versus non-leisure dichotomy.

The trail organizations may obtain useful information as to what types of volunteer activities and assignments are preferred over others and the types of rewards and satisfactions that these activities provide. The findings should provide useful feedback on ways to improve volunteer satisfaction in these activities. Furthermore, the study has potential for generalizing as to which activities are considered recreational as opposed to being work-like in nature. By knowing the reasons why particular activities are preferred and disliked, an organization could potentially use this information to base future volunteer management decisions. This information could be particularly valuable in an organization's attempts to keep volunteers happy and committed. As an example, a decision could be made to put a greater emphasis on those assignments or activities that are more enjoyable to volunteers and improve or enrich those that are not. In addition, socio-economic and participation information might be useful to the organization in terms of recruitment. In this regard, the study could provide a profile of volunteers which organizations could use to base marketing strategies for future membership drives.

II. REVIEW OF THE RELATED LITERATURE

This literature review examines pertinent theoretical literature and research related to the problem outlined in Chapter 1. The review has three main sections. First, it examines volunteer participation characteristics, second, it looks at socio-economic and demographic correlates of volunteer participation, and finally, it outlines theories of volunteer motivation.

A. Volunteer Participation Characteristics

A number of studies have examined various attributes of volunteer participation. In this regard, research has been conducted on the amount of time volunteers contribute to the organization and whether or not they prefer positions of leadership. These topics will be examined in two sections.

Amount of Time Spent Volunteering

A number of studies have looked at the amount of time spent participating in voluntary associations by active members. Smith and Baldwin (1974:278) cite an American study by Wolozin (1968) which estimated that "the average volunteer puts in 239 hours per organization per year." Another estimate by Morgan *et al*. (1966) put forward an average of 150 hours per year per household for those people who did volunteer work in 1964. Szali's (1972) study of 44 U.S. cities indicated that Americans spent an average of three quarters of an hour in organizational activity per week. Smith and Baldwin (1974) estimated that when these figures were adjusted to take into consideration only active volunteers, the figures rose to approximately 5.6 hours per week (or 291 hours per year). In his study of volunteer participation in a New England town, Scott (1957) found an average attendance of 1.02 times per month for each membership held and an average duration per membership of 10 years. Booth's (1972) study of sex differences in social participation in two Midwestern urban areas found

that males and females spent an average of 9.0 hours and 9.8 hours per month respectively on association activities.

Some research has also been undertaken on time spent participating in voluntary associations in the sport, recreation and environmental sectors. Slack (1981) has reported on a limited number of studies which have examined administrators and executives of volunteer sport organizations. For example, Bratton (1970) found that executives in volleyball and swimming associations spent an average of 12.7 hours and 10.9 hours per week respectively in season and 2.9 and 3.9 hours per week respectively out of season on organizational activities. Slack's (1979) study found that Alberta sport administrators averaged 9.3 hours per week in season and 5.6 hours per week out of season in activities devoted to volunteer sport associations. In their extensive study of environmental volunteers in the United States, Zinger *et al.* (1973) found that 57 percent contributed less than 4 hours per week, 20 percent contributed between five to eight hours, 16 percent contributed between nine and twenty-four hours and 7 percent contributed more than twenty-five hours per week in their environmental association activities.

Curnan *et al.'s* (1979) study of active volunteers in two volunteer trail organizations in the eastern United States examined both the number of years of participation in VTOs and the number of hours contributed each year. The study found that the volunteers had actively belonged to trail clubs for an average of 12 years. In terms of hours volunteered per year, Curnan *et al.* looked at distinctions between low and high frequency volunteers. Low frequency volunteers were considered to be those who contributed between 1 and 120 hours per year whereas high frequency volunteers contributed from 121 hours to an excess of 480 hours per year. In this regard, 64 percent of the active volunteers fell within the low frequency category and 36 percent were within the high frequency category. It was also found that ". . . high frequency volunteers tend to volunteer for more trail clubs, join earlier, and volunteer for a longer

period than low frequency volunteers" (Curnan *et al.*, 1979:118).

Leadership Preferences

Voluntary associations are often characterized by their tendency to be run and controlled by a relatively few volunteers in the organization. Mitchelson and Slack (1982) cited Blau and Scott's (1962) typology of organizations and classified most voluntary associations, and particularly sport organizations, as mutual benefit associations. Blau and Scott (1962) saw two types of problems which occur in these organizations: membership apathy and oligarchical control (minority rule).

A number of authorities have tried to find reasons for this tendency. For example, Barber (1950) and Sills (1957) consider that "the amount of time and specialized skills necessary to be a leader, are reasons for membership apathy" (Slack, 1979:22). On the other hand, Michels (1959) suggests that all organizations by their very nature have a tendency toward oligarchy where the minority lead the majority. Bratton (1970:11) summarizes this trend in sport organizations:

> The affairs of sports associations can easily be handled by a very small proportion of the total membership. One of the first steps in the formation of a voluntary association is the election of an executive body. As the association becomes established, the executive body is gradually given greater responsibility in conducting the business of the association. An ambitious, active few are allowed to make decisions for the remainder of the membership, and are not likely to encounter much resistance unless their decisions drastically effect the personal welfare of the members.

B. Socio-Economic and Demographic Correlates of Participation

A number of socio-economic and demographic variables have been shown to be associated with volunteer participation. This section of the literature review will examine three major classes of variables. The first is the life-cycle variables which encompass such relate factors as age, sex and marital status. The second major class is socio-economic status which consists of education, income and occupation status. The third set of variables are the residential variables which include such factors as size of community and urban and rural differences. These three major classes of variables will be presented in three sections. Each of these will be followed by a section outlining

research undertaken on recreational voluntary organizations which discusses findings regarding the variable category in question.

The concept of participation in voluntary associations has generally been defined and operationalized in two different ways. The most frequently used definition is the number of voluntary associations with which a person is affiliated or the number of memberships that a person holds in different voluntary associations. Studies using this concept often operationalize survey questions to ensure that a person's affiliation in an organization goes beyond nominal membership. In other words, "affiliation" in most of these studies means that a person is at least somewhat active in the organizations in which he/she is a member. The other measure of participation consists of the amount of time spent volunteering in an organization or the degree of activity in the organization. Comparatively few studies have looked at participation in this manner. Both of these definitions are utilized in the following sections which compare participation to socio-economic and demographic variables.

Other studies have examined the socio-economic and demographic characteristics of members of specific types of voluntary associations (e.g. hiking clubs or sport organizations). This type of information can be useful, particularly if it is compared against census data for the overall reference population so that some form of measure can be obtained of the special characteristics of the members. The following sections, covering recreational voluntary organizations, review volunteer participation in this manner.

Because of the volume of information presented in this section of the literature review, a summarizing table has been presented in Figure 1. This table condenses the findings of the reviewed studies and indicates their source.

Life Cycle Variables

Variables included in this section have been found to be interrelated in so far as they suggest that various stages of a person's life are influenced by the interplay of age, marital status and parental and family responsibilities (family life cycle). The life cycle variables singly or in combination have been found to show definite patterns when correlated with voluntary participation.

Figure 1

Summary of Relevant Research

Socio-Economic and Demographic Correlates of Volunteer Participation

Subject	Findings	Source
A. Life Cycle Variables		
1. Age		
a. Voluntary Associations (In General)	i) Most literature indicates a curvilinear relationship with participation lower in the younger and older age groups and highest in the middle age groups	Babchuk & Booth, 1973 Cutler, 1976 Curtis, 1971 Hausknecht, 1962 Lazerwitz, 1973 Nelson *et al.*, 1978 Tomeh, 1973
	ii) Some literature reports an M shaped relationship with two peaks of participation at adolescence and middle age	Goldhammer, 1964 Reddy & Smith, 1973
b. Recreational Voluntary Associations	Most volunteers in sport, outdoor recreation and environmental organizations belong to middle age groups	Bolduc, 1973 Bratton, 1970 Curnan *et al.*, 1979 Slack, 1979 Zinger *et al.*, 1973
2. Sex		
a. Voluntary Associations (In General)	In general, mixed findings depending on whether affiliation or amount of time spent volunteering is measured	
	i) Men have a higher tendency to belong to voluntary associations and to have multiple memberships	Babchuk & Booth, 1973 Booth, 1972 Cutler, 1976 Hausknecht, 1962 Nelson *et al.*, 1978 Verba & Nie, 1972
	ii) Few differences in affiliation	Curtis, 1971
	iii) Women contribute equal or more time as compared to men	Allen, 1982 Booth, 1972 Scott, 1957 Verba & Nie, 1972

Figure 1 (Cont.)

Subject	Findings	Source
2. Sex (Cont.)	iv) Women can be expected to play an increasingly equal role as compared to men in voluntary action	Reddy & Smith, 1973
b. Recreational Voluntary Associations	Most volunteers in sport, outdoor recreational and environmental organizations are male as opposed to female	Bolduc, 1973 Bratton, 1970 Curnan *et al.*, 1979 Slack, 1979 Zinger *et al.*, 1973
3. Marital Status		
a. Voluntary Associations (In General)	i) Most literature indicates that married persons tend to have more memberships and are more active in voluntary associations than those in other marital status categories	Babchuk & Booth, 1973 Babchuk & Thompson, 1962 Booth, 1972 Curtis, 1971 Hausknecht, 1962 Reddy & Smith, 1973 Scott, 1957
	ii) Some literature suggests there is little difference between marital status categories	Allen, 1982 Bell & Force, 1956
b. Recreational Voluntary Associations	Most volunteers in sport, outdoor recreational and environmental organizations are married as opposed to other marital status categories	Bolduc, 1973 Bratton, 1970 Curnan *et al.*, 1979 Slack, 1979 Zinger *et al.*, 1973

Figure 1 (Cont.)

Subject	Findings	Source
B. Socio-Economic Status (Education, Income, Occupation)		
a. Voluntary Associations (In General)	Most literature indicates a positive relationship between SES and voluntary association affiliation	Axelrod, 1973 Babchuk & Booth, 1973 Booth, 1972 Curtis, 1971 Foskett, 1955 Goldhammer, 1964 Hausknecht, 1962 Hougland *et al.*, 1979 Hyman & Wright, 1971 Nelson *et al.*, 1978 Scott, 1957 Wilensky, 1973
b. Recreational Voluntary Associations	Most volunteers in sport, outdoor recreational and environmental organizations have higher SES. Specifically, volunteers tended to be highly educated, come from the white collar occupations and have above average incomes.	Beamish, 1978 Bolduc, 1973 Bratton, 1970 Curnan *et al.*, 1979 Devall, 1970 Harry *et al.*, 1969 Hendee, 1971 Hollands & Gruneau, 1979 National Sport and Recreation Centre, 1983 Slack, 1979 Theberge, 1980 Zinger *et al.*, 1973
C. Residential Variables 1. Size of Community a. Voluntary Associations (In General)	Research has indicated contradictory findings regarding voluntary association affiliation and the size of the community in which people reside	
	i) Affiliation is higher for those people living in smaller communities	Hausknecht, 1962
	ii) Affiliation is higher for those people living in mid-size communities	Curtis, 1971 Key, 1965

Figure 1 (Cont.)

Subject	Findings	Source
	iii) Affiliation is higher for those people living in cities and metropolitan areas	Hougland *et al.*, 1979
	iv) There is no relationship between voluntary association affiliation and community size	Babchuk & Booth, 1973
b. Recreational Voluntary Associations	Most volunteers in sport and outdoor recreational organizations live in either cities or suburbs	Beamish, 1978 Bolduc, 1973 Curnan *et al.*, 1979 Slack, 1979
2. Urban vs. Rural Differences		
a. Voluntary Associations (In General)	Research has indicated conflicting results regarding volunteer association affiliation and residence in rural or urban areas	Babchuk & Thompson, 1962 Hausknecht, 1962 Wright & Hyman, 1958
b. Recreational Voluntary Associations	Most volunteers in sport and outdoor recreational organizations live in urban areas.	Beamish, 1978 Bolduc, 1973 Curnan *et al.*, 1979 Hendee *et al.*, 1968 Slack, 1979

Age. As a single variable, age seems to show a definite relationship with voluntary participation (particularly with respect to volunteer association affiliation). Most studies have suggested a curvilinear or inverted U-shape relationship with participation lower in the younger and older age groups and highest in the middle age groups (Babchuk and Booth, 1973; Curtis, 1971; Cutler, 1976; Hausknecht, 1962; Lazerwitz, 1973; Nelson *et al.*, 1978). As Tomeh (1973:97) suggests, the pattern shows "an increase in membership as the person passes through adolescence, young adulthood, and adulthood, until fifty or sixty years of age, when membership begins to decline." He notes, however, that various studies have not been entirely consistent in terms of the specific age boundaries related to the peaking of voluntary participation in the middle years prior to participation decline. In addition, some researchers indicate slightly different trends, with an *M* shaped curve reflecting the relationship between voluntary participation and age. In this regard, they suggest that there are two peaks of participation, one peak occuring during adolescence and the other during middle age (Goldhammer, 1964; Reddy and Smith, 1973).

As noted earlier, only a limited number of studies have reviewed amount of time or frequency of attendance in voluntary organizations as a measure of participation. Cutler's (1976) study of two national U.S. surveys looked at both affiliation in voluntary associations (i.e. number of voluntary association memberships) as well as the number of associations in which a person said he/she was fairly active or very active. He found that the results were highly comparable and were in line with the curvilinear trend noted earlier by Tomeh (1973).

Theories have been put forward to explain the curvilinear relationship between participation and age. Tomeh (1973) cites Foskett (1955) who favoured a role theory explanation: "differences in participation are explained in terms of one's position in the social system, which necessitates a particular behavior pattern" (Tomeh, 1973:98). Related to this, the integration theory suggests that as younger people grow older, they increasingly become more involved in society as represented by career, community and family responsibilities, and this reaches a peak in their middle age years. As old age approaches, however, there is a gradual detachment from some of these societal responsibilities and the social networks that surround them, which eventually culminates

in retirement (Smith and Freedman, 1972; Tomeh, 1973).

Age is also related to the type of voluntary association with which people become affiliated. Children tend to belong to expressive groups while mature adults have a propensity to belong to instrumental or instrumental-expressive voluntary organizations. This latter tendency towards instrumental affiliation declines as old age approaches with the elderly more inclined to join expressive voluntary associations (Babchuk and Gordon, 1962). Therefore, as Tomeh (1973:98) notes, "there appears to be a cycle of associational type participation which parallels the life cycle."

Sex. Research on differences between male and female participation in voluntary associations suggests a number of trends. When affiliation in voluntary associations is measured, most studies have found that men have a higher tendency to belong to voluntary associations and to have more multiple memberships than do women (Babchuk and Booth, 1973; Booth, 1972; Cutler, 1976; Hausknecht, 1962; Nelson *et al.*, 1978; Verba and Nie, 1972). However, when the activity or amount of time spent participating is measured, studies indicate that women contribute equal or more time in voluntary associations than do men (Allen, 1982; Booth, 1972; Scott, 1957; Verba and Nie, 1972). In addition, Babchuk and Booth (1973) found that men are less stable in holding membership over a period of time than are women.

Some researchers believe that there are nominal differences in the affiliation of men and women in voluntary associations. A study by Curtis (1971) is a case in point. This study consisted of a cross cultural comparison of voluntary affiliation in six western nations including Canada. An important finding was that membership rates were higher for women in both Canada and the U.S. in comparison to the other four nations (Great Britain, Germany, Italy and Mexico). In addition, although male membership was higher than female membership in all six nations when unions were included, when the unions were excluded, there were no sex differences in Canada, only small sex differences in the U.S., and much greater sex differences in all the rest of the nations. The results for multiple memberships were similar; both the U.S. and Canada showed no sex differences when unions were excluded. Reddy and Smith (1973) also support the view that women can be expected to play an increasingly equal role (as compared to men) in voluntary action.

Another major trend is exhibited when the relationship between sex and the type of volunteer organization is examined. In this regard, men are more likely to belong to instrumental groups as compared to women who tend to belong to expressive groups (Babchuk and Booth, 1973; Booth, 1972; Nelson *et al*., 1978). Palisi and Ibrahim (1979:308) provide the following explanations for this trend:

> The evidence . . . suggests that women are more likely to belong to voluntary associations for leisure-expressive purposes. . . . Although women engage in instrumental groups which have a goal beyond leisure, taken in the strict sense of enjoyment, men dominate these groups. Men are more likely to use their leisure in a less immediately gratifying sense. They are interested in power, improving their occupational role and in providing service to the community. Leisure for enjoyment is less common to them than to women.

Babchuk and Booth's (1973) longitudinal study investigated sex differences in seven different types of organizations. Two of these types which are of interest to this review are recreational groups (e.g. bowling leagues, women's garden clubs, card clubs, etc.) and youth serving groups (e.g. 4-H, YMCA, YWCA, Scouts). The findings indicated that a greater number of women tended to be members of recreational groups than any other type of group. Babchuk and Booth (1973:33-34) suggested that "the high rate of affiliation for women in such groups is linked perhaps to their having a more flexible time schedule than men, particularly those not in the labor force and not too occupied by demands in the home." With regard to the youth serving groups, "men were as likely as women to be adult leaders of youth programs" (Babchuk and Booth, 1973:31).

Reddy and Smith (1973:20) also noted a difference between men and women in their chosen preferences for voluntary participation. They indicated that women have tended to participate in charitable, health and welfare fields while "men have been more active in political and economic forms of voluntary action." They suggested that these tendencies are learned in society as part of the socialization process and therefore do not reflect a biological or physiological predisposition. As such, these patterns are subject to change as societies, customs and roles change.

Another trend worthy of note links leadership roles of men and women to either instrumental or expressive groups. Booth's (1972) study showed a tendency for men to be leaders in instrumental groups and women to be leaders in expressive groups. He also found that although men were more affiliated than women in instrumental - expressive groups, both were almost equally represented in leadership roles. As an

explanation for these leadership tendencies, Tomeh (1973:99) states that "these distinctions could at least in part be attributed to differences in early sex role socialization as to differential experience and opportunities in later life."

Marital Status. There appears to be a definite relationship between marital status and participation in voluntary associations. In this regard, a number of studies have shown that married persons tend to have more memberships in voluntary associations than do single people or those who are divorced, widowed, or separated (Babchuk and Booth, 1973; Babchuk and Thompson, 1962; Curtis, 1971; Hausknecht, 1962; Reddy and Smith, 1973; Scott, 1957). In addition, married people tend to be more active in voluntary associations than those in the other marital status categories (Booth, 1972; Reddy and Smith, 1973). A limited number of studies have reported findings that do not support this relationship between marital status and participation. Slack (1981:22-23) cites Bell and Force's (1956) study which "showed no significant difference in membership between those who are married and those who are not." In addition, a recent American Gallup survey on volunteering (Allen, 1982) found that 58 percent of single people volunteered as opposed to 53 percent of married people and 42 percent of those who were widowed, divorced or separated. Although Reddy and Smith (1973:18) generally concur with the positive relationship between being married and volunteer participation, they also note one area of possible exception:

> . . . in the late teens and twenties, the single person has fewer responsibilities and demands on his time and may participate a bit more than his married counterpart.

Some literature (Harry, 1970; Tomeh, 1973) indicates that joint membership by spouses in a voluntary organization has a positive influence on their voluntary participation. As Harry (1970:827) notes, "it appears that it is marriage and consequent joint-spouse participation which gives rise to high participation in the world of voluntary associations."

Life Cycle Variables and Recreational Voluntary Associations

Studies focussing on sport, recreational and environmental associations show many of the life-cycle trends noted in previous sections.

Age and Family Life Cycle. Volunteers in sport organizations have been studied by Slack (1979) and Bratton (1970). Slack's (1979) study looked at volunteer sport administrators serving on the executive of the provincial sport governing associations in Alberta, while Bratton's (1970) study looked at executive members of two Canadian sport associations (i.e. swimming and volleyball). Slack's (1979) study indicated a curvilinear relationship between age and participation with the greatest percentage of members being within the 40-44 age group. He observes that, whereas it is likely that most participants in the various sports would come from the younger age groups, those who volunteer in support of these groups predominantly come from the middle age groups.

Bratton's (1970) study indicated mixed findings, with "executives in the swimming association [being] generally older than those in the volleyball association; 54.8 percent of swimming executives were over 40 years of age as opposed to 9.2 percent of the volleyball association who were in this age bracket." He attributed this difference to the probability that the volleyball executives were recruited from the actual players while the swimming executives were likely made up of parents of the swimmers.

In terms of outdoor recreational associations, studies indicate a curvilinear trend, with participation highest in the middle age groups with a tapering off towards the youngest and oldest age groups. This occurred both in Bolduc's (1973) study of the membership of a U.S. hiking club and in Curnan *et al.'s* (1979) study of core volunteers in volunteer trail organizations in the northeastern United States. Bolduc found the greatest numbers in the 45-54 year age groups while Curnan *et al.* found most volunteers to be in their fifties. A study by Harry *et al.* (1969) on a large outdoor recreation and conservation association in the U.S. pacific northwest found a mean age of forty-one years for the membership. The findings of the above three studies are in marked contrast to studies done on hikers and outdoor recreationists in general which suggest that the majority of participants fall into the younger age groups (Bureau of Outdoor Recreation, 1967; Hendee *et al.*, 1968; Murray, 1974; ORRRC, 1962) Curnan *et al.* (1979:121) offer the following explanation: ". . . perhaps volunteer activity fits in best with the middle-age lifestyle and phase of the life cycle."

A related type of voluntary group is the environmental voluntary association which often has outdoor recreational activities as part of its mandate. In their national study of environmental volunteers in the United States, Zinger *et al.* (1973) found that most volunteers were over 30, with approximately 50 percent being over 40 years of age.

Sex. In terms of the relationship of the factor sex to participation in recreational groups, research on outdoor recreational and environmental associations and sport governing associations all indicate that there are more male than female participants.[1] Studies on sport executive volunteers show a disproportionate number of males participating as compared to females. In his study of sport administrators in Alberta, Slack (1979) found that 66.7 percent of respondents were males. Bratton's (1970) study of two sport organizations found that men made up approximately three-quarters of the executive of the organizations. A study by Hollands and Gruneau (1979) on national level sport administrators covering the years 1955, 1965 and 1975 indicated similar results. However, they did find a slight overall increase in female representation from 1955 to 1975. Theberge's (1980) study on executives of sport organizations in Ontario found that only 19.5 percent of the participants were female.

Bolduc (1973), in his study of a U.S. hiking club, found that 61 percent of the membership were male and 39 percent were female. He accounted for this difference by suggesting that traditional sex roles associated with early pioneer activities have overlapped into the outdoor recreation sphere. Another explanation was that the lack of female participation was due to women's added parental responsibilities or to sex role expectations (e.g. "the female is expected to stay home with the children while the male is allowed more freedom - either to pursue his own interests or to unwind from his task as breadwinner" (Bolduc, 1973:8). Bolduc observed that the latter explanation was the more likely since there was a definite underrepresentation of females that were married as compared to males that were married. Curnan *et al.'s* (1979) study on trail volunteers and Zinger *et al.'s* (1973) research on environmental volunteers suggested the typical volunteer in each of these types of organizations is male.

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[1]It must be noted, however, that those particular studies are not representative of the wide range of voluntary groups that exist in the recreational and leisure sector.

The above noted studies which suggest that men make up the majority of participants in these specific organizations are in direct contrast with Babchuk and Booth's (1973) longitudinal study on adults in Nebraska, which showed that women constituted the majority of participants in recreational groups. This discrepancy can at least be partially attributed to the limited variety and representation of recreational groups included in the literature. It would also seem to be evident that the outdoor recreation and sport organizations reviewed above are groups that have been traditionally male-oriented, particularly in terms of the recreation or sport activity which forms the focus of the organization. As Slack (1979:59) states: "a reason for the greater involvement may be socialization patterns of the sexes in regard to sport." Another explanation is that some of these groups are largely instrumental in nature which, as noted earlier, tends to attract more males than females. Volunteers of environmental groups and sport-governing associations are undertaking tasks largely of an instrumental nature, that is, the goals are long range and outside of the immediate gratification of its own members.

Marital Status. Studies undertaken on recreational and associated voluntary associations generally support the general research literature on marital status which was previously reviewed in an earlier section. Studies on volunteer sport administrators found a higher preponderance of married people compared to those single, widowed or divorced (Bratton, 1970; Slack, 1979; Theberge, 1980). For example, Slack's (1979) study found that a great majority of the respondents were married (84 percent) and that this was significantly higher than the census profile of married Albertans (62.9 percent of the population). Similarly, only 12.1 percent were single compared to the census figure of 27.4 percent, while 3.6 percent were widowed or divorced compared to the census figure of 9.7 percent of the population.

Slack (1979) also found that when ages of participants were broken down by gender, there was less participation by women as compared to men within the 30 to 50 age range. Slack (1981:22) postulated that this "may be partially explained by the fact that these are the years in which many women are traditionally involved with raising a family and consequently little time is available for participation in voluntary organizations."

Bolduc (1973), in his study of a Vermont hiking club, found that overall, the proportion of married people was slightly above the New England averages. However, when he looked at the interaction of sex and marital status, he found differing trends between the two sexes. In this regard, many more of the male participants were married as compared to the female participants. Bolduc (1973:8) noted that: "one possible explanation of this relationship might be that the time-consuming responsibilities of marriage and parenthood weigh more heavily on the females." In addition, he noted that there was a high proportion of single females which were "over-represented as a portion of the sample" (Bolduc, 1973:9). He attributed this to the important social nature of these clubs which might be an attraction to unmarried women. Curnan *et al*. (1979) found that the majority of trail volunteers were married and that 13 percent of the participants volunteered with their spouses. Zinger *et al*. (1973) also reported that the typical environmental volunteer was married rather than single.

Socio-Economic Status

Socio-economic status (SES) is generally considered to be a composite of the social indices of education, income and occupation. Existing studies reveal that there is a definite positive relationship between SES and volunteer association affiliation (Axelrod, 1973; Babchuk and Booth, 1973; Booth, 1972; Curtis, 1971; Foskett, 1955; Goldhammer, 1964; Hausknecht, 1964; Hougland *et al*., 1979; Hyman and Wright, 1971; Nelson *et al*., 1978; Scott, 1957; Wilensky, 1973). In addition, studies that have looked at the amount of attendance or time spent in voluntary association activities as well as the tendency to hold office show an equally powerful positive relationship between this form of volunteer participation and SES (Bell and Force, 1956; Booth, 1972; Hougland *et al*., 1979, Reddy and Smith, 1973). As Tomeh (1973:97) notes: "at least one conclusion seems warranted, viz., that persons of higher SES are more likely to participate in formal organizations than are their counterparts in low SES groups." Reddy and Smith (1973:19) suggest that this tendency does not preclude participation by lower SES groups but that "there are gradual changes in individual participation rates corresponding to positions all along the socio-economic status continuum."

A number of authorities have sought explanations for this relationship. Smith and Freedman (1972:154) suggest that those with higher socio-economic status tend to have a number of advantages that build up in their favour while the opposite is true for those with lower SES. Foskett (1955) on the other hand, favours the role behavior theory which suggests that a person in a given socio-economic class will tend to live up to the roles and behavior expected of that class. In this regard, voluntary association membership may be seen to be advantageous to the person aspiring to the higher SES since it is often recognized as being a prerequisite to advancement in one's career. In addition, the expectation of certain types of behavior within the social class is often enough to exert pressure to act in accordance with the norms of that class. Further, Foskett suggests that people of higher SES also tend to have the necessary skills and abilities as reflected in their education and careers to participate effectively in voluntary associations.

Socio-Economic Status and Recreational Voluntary Associations

In terms of sport, recreational and environmental organizations, findings similar to those outlined in the previous section are evident. With regard to active volunteers in sport organizations, the results of a number of studies indicate a consistently positive relationship between volunteer participation and education, income and occupation (Beamish, 1978; Bratton, 1970; Hollands and Gruneau, 1979; National Sport and Recreation Centre, 1983; Slack, 1979; Theberge, 1980).

Studies of outdoor recreational voluntary associations show similar results. Bolduc's (1973) study of the characteristics of members of a Vermont based hiking club found income to be above average with over 55 percent of the members in white collar occupations, particularly in the Professional/Technical category. This category was highly overrepresented when compared with census averages for this category. Bolduc (1973) found that the leading occupations for males were teachers, managers, skilled workers, proprietors and researchers, while females were teachers, housewives, secretaries and nurses. Bolduc noted that the greater majority of the jobs represented were very sedentary and located indoors. This might suggest that sedentary workers may have turned to hiking associations to obtain physical exercise and escape from

office routine. Bolduc (1973) also found proportionately higher educational levels among members when compared with census averages. Members had a median number of 15.5 years of education. Sixty three percent of the respondents had 16 years of education or more and 36 percent had some post-graduate study behind them.

Curnan *et al.'s* (1979) study of trail volunteers in two clubs in the northeastern United States showed similar results. It was found that the respondents had reasonably high incomes, particularly in terms of household income (as compared to individual income). In addition, there was a tendency, although not statistically significant, for high frequency volunteers (those contributing over 120 hours per year) to be in the highest income brackets (above $40,000). Similar to Bolduc's (1973) findings, Curnan *et al.* (1979) found that a high proportion (47 percent) of the respondents had professional occupations. White collar occupational categories were highly represented with managers making up 27 percent and academics 13 percent of employed respondents. Of some interest was the fact that unemployed respondents were quite highly represented, making up 26.9 percent of the respondents. In terms of education, the volunteers had a high degree of schooling. Curnan *et al.* (1979:118) found that "87 percent of the sample population had at least some college training, with 47 percent indicating educational experience beyond the bachelor's degree."

Other studies on outdoor recreational and environmental associations solidly reinforce the findings of these two studies (Devall, 1970; Harry *et al.*, 1969; Hendee, 1971; and Zinger *et al.*, 1973). Harry *et al.* (1969) and Hendee (1971) suggest that education can be considered a reliable predictor of participation in outdoor recreational and environmental activities both in an informal leisure sense as well as in organized voluntary associations. However, Hendee (1971) notes that there is still a hierarchy of educational levels between the various types of participants:

> In general, education seems to most sharply distinguish membership: those belonging to instrumental conservation groups tend to be of a slightly higher educational level than members of expressive outdoor clubs. Members of such organizations are more highly educated than outdoor recreationists in general, who are also well educated (Hendee, 1971:125).

Residential Variables

This section will examine the relationship between voluntary participation and the variables size of community and rural versus urban residency.

Size of Community. Studies have indicated contradictory findings when the relationship between voluntary participation and size of community has been examined (Hougland *et al.*, 1979; Palisi and Ibrahim, 1979; and Tomeh, 1973). For example, Hausknecht (1962, as cited by Hougland *et al.*, 1979:603) reported that "except for those attached to civic organizations, persons in smaller communities were more likely to be joiners than people in larger communities." On the other hand, Curtis (1971) found somewhat higher membership rates in mid-size communities of 20,000 to 50,000 population than in larger or smaller sized communities in the United States. Key (1968, as cited by Hougland *et al.*, 1979) also found a similar pattern. However, contrary to the above findings, Hougland *et al.* (1979) found no support for the findings that people in mid-sized communities had higher rates of affiliation or activity in voluntary associations. Instead, their results indicated that "respondents in cities and metropolitan areas were most likely to report experience with voluntary organizations. . ." (Hougland *et al.*, 1979:607). In final contrast, Babchuk and Booth (1973) found no relationship between voluntary association affiliation and community size.

Urban vs. Rural Differences. In general, results have been conflicting concerning the relationship between voluntary participation and residence in rural or urban areas (Babchuk and Thompson, 1962; Hausknecht, 1962; and Wright and Hyman, 1958). However, Tomeh (1973:102) attributes the lack of conclusive support for differences between urban and rural settings to the growing similarities between the two types of communities. A recent U.S. Gallup survey (Allen, 1982), although not resolving the above noted discrepancies, showed that people living in rural areas spent more hours in volunteer activity than did urban residents.

It is evident that there are no conclusive findings concerning either of the two residential variables. Thus, it seems that residential variables may not be important correlates for general volunteer participation, at least at this stage of research on the subject.

Residential Variables and Recreational Voluntary Associations

Studies of volunteers in recreational organizations generally show tendencies for participants to have residences in urban areas. Studies done on outdoor recreation and environmental associations definitely conform to this pattern (Bolduc, 1973; Curnan *et al.*, 1979; Hendee *et al.*, 1968). Curnan *et al.* (1979:120) observed the following about the trail volunteers in their study: "while most of the volunteers work in large cities, they live in suburbs and would prefer to live and work in yet smaller communities." Bolduc (1973) also found that a majority of members of a U.S. hiking club were urban residents, with 35 percent living in the city and 34 percent living in suburbs; however, he also found that a relatively large group of the members (30 percent) lived in non-metropolitan areas (e.g. village, farm, etc.). Bolduc's (1973) figures apparently closely conform to national figures on residential distribution in the U.S. With regard to volunteers in sport organizations, both Beamish (1978) and Slack (1979) have found a propensity for these volunteers to have residences in urban areas and in particular, the large cities (Slack, 1981).

C. Volunteer Motivation

The subject of motivation in voluntarism deals with the questions of why people volunteer and what rewards or satisfactions they obtain from participating in these activities.

Motivational Theories

A number of motivational theories have been put forward to explain why volunteers participate. For example, Wilson's (1976) book on the management of volunteer programs has tried to apply a number of theories that have been utilized in the management of work-type organizations. These include: Maslow's Hierarchy of Needs Theory, Herzberg's Motivational-Hygiene Theory, McClelland and Atkinson's Achievement-Power-Affiliation Theory and Vroom's Expectancy Theory. Other authorities have also looked to these work-type motivational theories for possible reasons for volunteer participation (Briggs, 1981; Henderson, 1980, 1981(b); Knowles, 1972; Naylor, 1967).

Brigg's (1981) study, however, suggests there may be differences between the motivations of volunteers and those of paid employees. This study utilized Herzberg's motivational theories and compared the findings of a Psychology Today study on employee attitudes to her own data on attitudes of volunteers serving in schools (as teachers or clerical aides). Both used similar instruments based on the Herzberg Motivation-Hygiene Theory. Her findings suggested that although there were some similarities between the two groups there were also important differences. In this regard she notes:

> Because the data suggest that there are important differences in what motivates volunteers and what motivates paid workers, and differences in what volunteers and paid workers find satisfying and consider to be most important, the volunteer program administrator should exercise caution in drawing too close a parallel between industry and voluntarism (Briggs, 1981:6).

One motivational theory that has been applied to voluntarism research is the Social Exchange Theory. It suggests that behavior is intentionally directed toward goals that are rewarding as opposed to those that are not (Edwards and Booth, 1973). Further, it contends that people will invest their energy into obtaining positive goals at a particular cost to themselves as long as the eventual rewards are at least commensurate with the costs (Edwards and Booth, 1973; Phillips, 1982; Schafer, 1980).

In terms of this theory, one would expect that a volunteer who makes an investment of time and effort must be directing it towards some form of positive goal which will be rewarding and will compensate him/her for this investment. If this occurs, one would expect continued participation by the volunteer. However, if the reward does not compensate the volunteer for the cost, then the volunteer will discontinue participation.

Phillips (1982) suggests that the altruistic aspect of voluntarism (e.g. helping others, serving the goals of the organization, etc.) can be thought of as the costs of the social exchange. What a person receives in return for the altruistic acts are the egoistic or self-interest rewards of voluntarism (e.g. self actualization, recognition, status, greater knowledge, etc.). He cites Schafer (1980) who has pointed out that "to sustain a volunteer effort over time the rewards to the volunteer must exceed or at least balance the costs" (Phillips, 1982:118).

Phillips further notes that volunteer programs can be evaluated in terms of whether these altruistic costs are met or superceded by egoistic or self-interest rewards. He therefore suggests that the drive to continue volunteering may be influenced "by the degree to which the expectations of the volunteer are met" (Phillips, 1982:119). He also contends that people will constantly evaluate these costs and benefits throughout the various phases of their volunteer effort. Thus, a person's initial motivation for joining a voluntary program or organization may in fact shift once the volunteer has participated for a while and has evaluated the costs and rewards of participation.

Another theoretical explanation relates volunteer motivation to the particular orientation or functions of the voluntary association - whether it be instrumental or expressive in nature (Babchuk and Edwards, 1965; Jacoby, 1965; Jacoby and Babchuk, 1963). An instrumental voluntary association has as its primary function the attainment of goals that are long range in nature and will produce an effect on some segment of the community or society at large. Only when this goal is attained does satisfaction accrue to the membership. On the other hand, an expressive voluntary association has as its main function, the offering of activities which provide immediate gratification for its own members. An instrumental-expressive association offers a mixture of the functions of both of these types of organizations (Edwards and Booth, 1973).

In this theory, Jacoby (1965) contends that individuals may be attracted to the different types of rewards offered by these two types of organizations because these individuals have either instrumental or expressive orientations to life. He suggests that people who join instrumental groups have lifestyle orientations that reflect a concern "with long range goals at the expense of immediate satisfaction and of being concerned with other people only to the extent that they represent means to distinctly personal ends" (Jacoby, 1965:174). On the other hand, people who are attracted to expressive voluntary associations, have lifestyle orientations that suggest that they are interested in more immediate rewards as reflected in their "greater need or desire for close, personal ties with others (and their ability) to establish and maintain such relationships" (Jacoby, 1965:174-75). Babchuk and Edwards (1965) and Edwards and Booth (1973) note however, that a mixture of the above two types of orientations are inevitable since both

types of organizations often provide opportunities for the simultaneous expression of instrumental and expressive motivations and satisfactions.

Many studies indicate that volunteer motivation comprises a combination of altruistic and self-interest motives (ACTION, 1975; Allen, 1980, 1982; Anderson and Moore, 1978; Applied Research Centre, 1981; Blumberg and Arsenian, 1960; Carter, 1975; Phillips, 1982; Pratt and Gustavson, n.d.; Wiehe and Isenhour, 1977). Of these two major motivational categories, there has been a growing contention by many authorities that self-interest motivations have become increasingly important to volunteers (Allen, 1980; Carter, 1975; Schindler-Rainman and Lippitt, 1977; Weinberg, 1975). They note that at one time, altruism was thought to be the all-pervasive motivation in voluntarism. Schindler-Rainman and Lippitt (1977:15) suggest, however, that voluntarism is becoming an activity that people are pursuing for its own sake. Aves (1969) would also add sociability as another motivation category and this also has some support in the literature (Applied Research Centre, 1981; Goldhammer, 1964; Kelly, 1978; Palisi and Ibrahim, 1979). These three concepts are defined by Aves (1969:42) as follows:

1. Altruism: Wanting to do something for others
2. Self Interest: Seeking personal benefit such as experience, interest, knowledge, or occupation
3. Sociability: Wanting to meet people, to make friends

Weinberg (1975) clarifies the two main motivation categories of self-interest and altruism by noting the various types of motives within each. She suggests that associated with the self-interest type are such motives as: "the chance to learn and grow, make new friends, be needed, belong to a group, be part of a team, develop new interests, receive recognition, test out career possibilities" (Weinberg, 1975:10). Motivations associated with the "atruistic" type include such things as "wanting to reach out to people in need, advance a cause, serve as an advocate to aid the cause of others" (Weinberg, 1975:10).

A Canadian nationwide survey of volunteers undertaken by the Canadian Council on Social Development and reported by Carter (1975) supports this dual motivation

theory. Respondents were asked to rate the two most important reasons for volunteering in a listing of motivational factors which were grouped into five main categories: altruistic, self-interest, sociability, rational and religious/ethical. The findings were overwhelmingly supportive of the importance of altruism and self-interest as motivations in comparison to the other categories. (Scores were 87.4 percent for altruism, 78.4 percent for self-interest, 33.5 percent for rational, 27.0 percent for sociability and 14.7 percent for religious/ethical).

Although Allen (1980) also recognizes that volunteers are motivated by both self-interest and altruism, he further classifies volunteer motivation into four specific categories. These are altruism, expression of belief, intangible personal rewards and tangible personal rewards. Allen (1980:18) describes altruism as "a willingness to give unselfishly to others." Expression of belief reflects the need to volunteer as a "tangible expression of a religious, ethical, moral or patriotic belief" (Allen, 1980:19). Intangible personal rewards involve a wide variety of motives including personal fulfillment, challenge, intellectual, emotional and physical stimulation, a sense of responsibility, status and prestige (Allen, 1980:19-20). Tangible personal rewards include such benefits as the acquisition of new friends or important job related skills and experience to further one's career (Allen, 1980:20).

A closer look at the general category of self-interest motivation will reveal two types of motivation that make up a major motivational theory of behavior. This theory looks at intrinsic and extrinsic motivation and is generally recognized in both the social psychological and leisure literature.

Intrinsic and Extrinsic Motivation

An increasingly popular theory of motivation relates behavior to intrinsic or extrinsic motivation. This theory is based on the cognitive school of thought in psychology which proposes that people make conscious decisions to act in a certain

manner based on their own thought processes (Deci, 1975).

Intrinsic Motivation. Iso-Ahola (1980) notes that behavior directed toward goals and rewards can be either intrinsically or extrinsically motivated. Intrinsic motivation has a number of attributes worth noting. A commonly accepted definition of intrinsic motivation asserts that activities are participated in for the internal satisfaction and enjoyment of doing the activity itself as opposed to doing the activity for an external reward (Deci, 1975). Deci, however, notes that this definition requires a more precise explanation of the internal consequences of intrinsically motivated behavior. In this regard, the effect of these internal rewards is felt in the central nervous system and as such are different from biological drives (e.g. hunger) which have effects on other non-nervous system tissues. Further, he notes that intrinsically motivated behavior is directed towards specific intrinsic rewards or satisfactions, which consist of feelings of competence and self-determination. Another major attribute of intrinsic motivation is that it is inherent in all people: "all humans are born with the basic and undifferentiated need for feeling competent and self-determining" (Deci, 1975:65). Deci notes that as a person interacts with the environment throughout his or her life, motivation becomes differentiated into various specific motives such as needs for achievement, self-actualization and cognizance. Further, due to the various factors in the person's environment, these types of motives can further develop and change throughout a lifetime.

Deci (1975) also suggests that there are two major types of behavior which one may engage in to obtain feelings of self-determination and competence. The first concerns itself with a person's need to avoid boredom and pursue opportunities for stimulation and challenge. In this regard, the person tries to avoid boring situations on the one hand and overchallenging situations on the other hand. The second type of behavior motivated by intrinsic motivation involves the mastering of the challenge. Deci (1975:57) summarizes the two types of behavior as being "behavior which *seeks* optimal

challenge and behavior which *conquers* challenge." He adds: "In short, people seem to be engaged in the general process of seeking and conquering challenges which are optimal for them" (Deci, 1975:62).

One final aspect of intrinsic motivation is that it provides the energy for goal directed behavior, that is, behavior that the person expects will satisfy his needs. The reward or satisfaction for achieving these goals is the internal affective state of feeling competent and self-determining.

Extrinsic Motivation. The other type of goal directed motivation is extrinsic motivation. Iso-Ahola (1980:231) notes that "when an activity is performed to obtain a reward which is extrinsic to the activity, it is said to be extrinsically motivated." Kreisel (1980:5) notes that "an activity becomes extrinsic in nature if external reasons . . . from within the environment are suspected or become evident." Deci (1975) suggests that extrinsic motivation may manifest itself in individuals as primary drives such as hunger or thirst. The consequences for satisfying these drives are felt in non-nervous system tissues. However, it would also appear evident that extrinsic motivation is not only synonymous with primary drives and the satisfaction of tissue needs. Some types of extrinsic motivation may be directed towards other types of rewards from the external environment. Such examples of these extrinsic rewards are found in the work environment and include money, fringe benefits, pay increases, promotion, incentive certificates or pins, etc. In the leisure environment they can take the form of medals, ribbons, trophies, and "ice cream for winning." However, many equally important extrinsic rewards are more intangible in nature and can be important both within work and leisure. Some of the common intangible rewards include: approval from others, recognition, prestige and social status. These type of rewards might come from a respected figure or alternatively from a person's family or social peer group (Iso-Ahola, 1980; Katz and Kahn, 1978).

Extrinsic motivation can also be positively influenced by a person's perception that "participation is required in certain activities because of some social pressures or other situational inducement" (Iso-Ahola, 1980:216). Thus, in terms of a leisure activity, a person may feel obligated to take his clients out for a game of golf to encourage further business from them. He would therefore feel extrinsically motivated to play golf under these conditions.

The obvious question following from the above discussion is whether behavior can be motivated by both intrinsic and extrinsic factors simultaneously. Iso-Ahola (1980) notes that this is possible and indeed probable. The problem however, with the factor of extrinsic rewards is the aspect of their continued reliability:

> Continued participation in such half-intrinsic, half-extrinsic activities is severely hampered if extrinsic rewards are taken away. Of course, a person can be made to engage in almost any behavior by extrinsic rewards, but once the rewards are removed, interest dies (Iso-Ahola, 1980:232).

Further, Iso-Ahola (1980) notes that extrinsic factors or rewards can actually undermine intrinsic factors. This refers to whether a person relates the course of his actions as directed toward fulfilling his own needs or toward fulfilling external or other people's needs. If an extrinsic reward or situational pressure is forced upon a person who is intrinsically motivated to participate in an activity, then a person will perceive that he is no longer the originator of control in the situation. Subsequently, the motivation to participate in the activity for its own sake will deteriorate (Iso-Ahola, 1980).

Voluntarism as a Leisure Experience

A relatively recent theory suggests that people may be motivated to participate in volunteer activities by virtue of the activities' capabilities to produce rewarding leisure or recreational experiences. It would appear that in practice, recreational agencies are already taking the stance that forms of volunteer service are in fact recreational to those involved (Henderson, 1981b; Lenox, 1978). A number of articles in recreational periodicals point out the many ways in which volunteers can assist in recreational programming, facility construction and maintenance, both within urban and dispersed parks (Grist, 1976; Trends, 1975; Trudeau, 1976; Weinberg, 1975). These articles

generally point out the positive leisure rewards that can be obtained from this type of voluntarism.

It is important at this point to clarify the meaning of the concepts of leisure and recreation. The definition of leisure used in this thesis is based on arguments put forward by both Iso-Ahola (1980) and Neulinger (1981) which suggests that leisure has both an objective and subjective component. This definition is as follows:

> Leisure is a mental construct which people tend to objectively describe as free time or non-work hours and subjectively associate with a state of mind or experience brought about by engaging (or participating) in a freely chosen activity, pastime or pursuit which is intrinsically rewarding to the person.

There are a number of important aspects to this definition. First, the objective definition sees leisure in terms of unobligated or discretionary time. As Neulinger (1981:18) states, "This is the most frequently used definition in the sociological literature and is often referred to as the residual definition of leisure: time left over after existence and subsistence needs have been taken care of." Secondly, the subjective definition associates leisure with a pleasurable state of mind or experience brought about by participating or engaging in some form of activity. Further, the particular activity (or pastime), is one which has to be freely chosen and intrinsically rewarding to the person.

It is suggested that the objective and subjective definitions are not mutually exclusive but that aspects of both definitions may exist in people's minds when they think of the meaning of leisure. For example, when asked what leisure is, a person might think of a freely chosen and enjoyable activity in which they participate during their free time as well as the pleasurable feelings or experiences that they associate with it.

The subjective view of leisure and recreation as an experience or state of mind has become increasingly popular in literature on the subject (Driver and Tocher, 1970; Gray, 1972; Iso-Ahola, 1980; Neulinger, 1974; 1976; 1981). Driver and Tocher, for example, see recreation as a "psycho-physiological experience" (1970:87) or a "state of mind" (1970:95). Their perspective is that recreation results from engagements (or activities) and that these engagements are made up of a number of factors which are as follows:

1. Recreation engagements require a commitment by the recreationist.

2. Recreational engagements are self-rewarding: the engagement finds pleasure in and of itself, and recreation is the experience.

3. Recreational engagements require personal and free choice on the part of the recreationist.

4. Recreational engagements occur during non-obligated time.
(Driver and Tocher, 1970:87)

According to Driver and Tocher, all of the above factors must be present before an experience can be considered recreational.

It is suggested that the above definition of recreation is very similar to the subjective definition of leisure previously discussed. In order to prevent any confusion in this thesis, the term leisure will be used to indicate this subjective state of mind or experience.

Inherent in all of the subjective definitions of leisure and recreation is the concept of free choice, and intrinsic motivation and rewards. The previous section has already defined and discussed intrinsic motivation and rewards. The other major concept to be defined is perceived freedom. Perceived freedom relates to a person's perception of free opportunity and choice when pursuing a goal. Both Neulinger (1974, 1981) and Iso-Ahola (1980) present strong cases for viewing perceived freedom as the prime precursor of leisure. As Neulinger (1974:15) notes:

> Leisure has one and only one essential criterion, and that is the condition of perceived freedom. Any activity carried out freely, without constraint or compulsion, may be considered to be leisure. To leisure implies being engaged in an activity as a free agent and of one's own choice.

Iso-Ahola (1980) cites a number of studies (Iso-Ahola, 1977; 1979; Kelly, 1972; Mannell, 1978; Wankel and Thompson, 1977) that suggest that perceived freedom is a very important aspect of a person's definition of leisure. Iso-Ahola's (1980:189) own research suggests that "perceived freedom is the critical regulator of what becomes leisure and what does not." He notes that if perceived freedom does not exist in the first place, the act of introducing other elements of intrinsic motivation (i.e. feelings of self-determination and competence) will not be sufficient to enhance leisure involvement. Further, he notes that: "perceived freedom is high when a person attributes the initiation of leisure to self, but is low when he ascribes the source of behavior to external

factors" (Iso-Ahola, 1980:186).

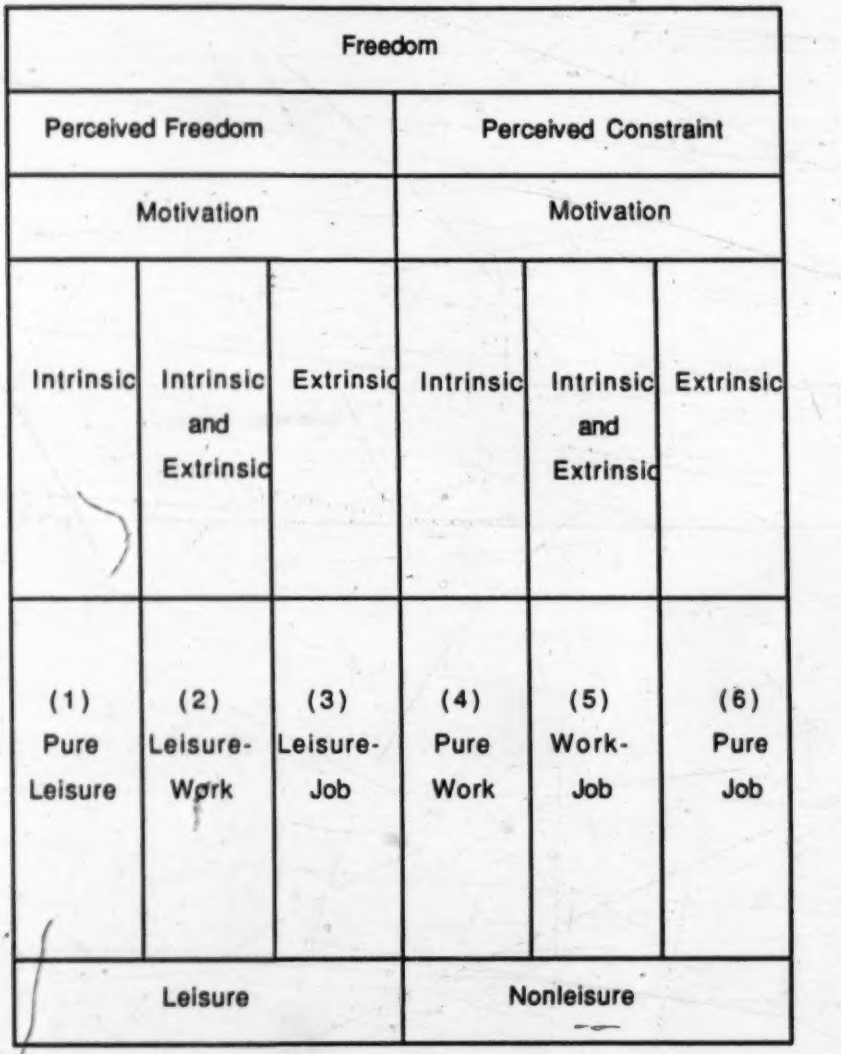
Neulinger (1981) incorporates both perceived freedom and intrinsic/extrinsic motivation into a paradigm of leisure, as seen in Figure 2. This paradigm is based purely on the subjective definition of leisure. The model's importance rests on the presence of a continuum of perceived freedom/constraint and intrinsic/extrinsic motivation, which explains the extent to which an activity is subjectively perceived to be leisure or non-leisure.

As can be seen, the model is made up of six cells. The first cell, *Pure Leisure*, describes a state of mind in which a person experiences perceived freedom and intrinsic motivation and is therefore "brought about by an activity freely engaged in and done for its own sake" (Neulinger, 1981:31). It represents the concept of leisure in its purist sense. *Leisure - Work* in the second cell includes perceived freedom with a combination of intrinsic and extrinsic motivation. In this case, rewards to the individual can include an extrinsic payoff as well as internal satisfaction to the individual. In the third cell, *Leisure - Job*, although perceived freedom is present, the rewards are only extrinsic in nature. As Neulinger (1981:32) notes, the above three cells represent leisure experiences because of the element of perceived freedom. "The person perceives him or herself as the originator of his or her behavior, as being able to quit whenever desired and of being under no pressure to continue."

The remaining three cells describe non-leisure. *Pure Work* describes a state of mind where perceived constraint is combined with intrinsic motivation. Although freedom is missing, satisfaction accrues from participation in the activity. *Work - Job* places perceived constraint with a combination of intrinsic and extrinsic motivation. This type of experience might occur in an employment situation where sought after rewards include internal satisfaction and extrinsic rewards such as a paycheque. The *Pure Job* cell represents a state of mind where only perceived constraint and extrinsic motivation are present. An individual in this situation faces an activity (e.g. employment) that he is obligated to do while receiving external payoffs (e.g. paycheques) but obtaining no internal satisfaction. As Neulinger (1981:32) notes, these cells "share a sense of constraint, a lack of perceived freedom, of being a pawn rather than an origin."

Figure 2

A Paradigm of Leisure: A Subjective Definition



Source: Neulinger (1981:30)

Motivational Attributes of Trail Volunteer Participation

Research indicates that leisure motivation can be looked at in terms of specific needs or reasons for participation (e.g. social interaction, achievement, learning skills, adventure, recognition, etc.). Crandall (1980) has reviewed a number of studies which have both identified and measured people's needs and satisfactions.[3] He has also put forward a set of 17 leisure motivation categories which resulted from the input of leading researchers at a conference held in 1977. Figure 3 shows the 17 major motivational categories with sample statements under each category. Whereas Crandall implies that this listing is a comprehensive attempt at bringing together most of the motivations related to leisure participation, he does not rule out that this listing might require future improvements.

One of the major objectives of motivational research is to understand and predict the needs of people so as to better design leisure activities, programs or facilities that satisfy their needs. In this regard, numerous studies have researched various types of recreationists in order to profile their motivations for leisure participation (e.g. Bolduc, 1973; Driver, 1976a; Driver, 1976b; Hawes, 1978; Hendee *et al.*, 1968; Jackson, 1982; Jackson and Wong, 1982; Kroening and Jackson, 1984; ORRRC, 1962; Rossman and Ulehla, 1977; Shafer and Mietz, 1972).

A few studies have been found that have looked at the specific reasons for participating in various types of volunteer agencies and organizations. These studies have examined social service agency volunteers (Anderson and Moore, 1978), 4-H club volunteers (Henderson, 1981a and 1981b), volunteer action centre volunteers (Applied Research Centre, 1981; Pratt and Gustavson, n.d.), volunteers in schools (Briggs, 1981), group leaders and board members (Blumberg and Arsenian, 1960).

Of particular interest to this thesis are the findings of Curnan *et al.* (1979) in their study of volunteers in two VTOs in the northeastern United States. They examined the specific reasons for volunteer participation as well as the types of assignments or activities that they most enjoyed and least enjoyed doing. They found four reasons to be

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[3]With respect to the variety of terminology used (e.g. needs, reasons, motives, satisfactions, etc.), Crandall (1980:50) provides the following distinction: "needs, reasons and motivations can be looked at as such things that cause leisure to be sought, while satisfactions, need satisfaction and psychological outcomes can result from leisure."

Figure 3
Motivational Categories and Items

1. **ENJOYING NATURE, ESCAPING CIVILIATION**
   To get away from civilization for awhile
   To be close to nature

2. **ESCAPE FROM ROUTINE AND RESPONSIBILITY**
   Change from my daily routine
   To get away from the responsibilities of my everyday life

3. **PHYSICAL EXERCISE**
   For the exercise
   To help keep me in shape

4. **CREATIVITY**
   To be creative

5. **RELAXATION**
   To relax physically
   So my mind can slow down for awhile

6. **SOCIAL CONTACT**
   So I could do things with my companions
   To get away from other people

7. **MEETING NEW PEOPLE**
   To talk to new and varied people
   To build friendships with new people

8. **HETEROSEXUAL CONTACT**
   To be with people of the opposite sex
   To meet people of the opposite sex

9. **FAMILY CONTACT**
   To be away from the family for awhile
   To help bring the family together more

10. **RECOGNITION, STATUS**
    To show others I could do it
    So others would think highly of me for doing it

11. **SOCIAL POWER**
    To have control over others
    To be in a position of authority

12. **ALTRUISM**
    To help others

13. **STIMULUS SEEKING**
    For the excitement
    Because of the risks involved

14. **SELF-ACTUALIZATION (FEEDBACK,SELF-IMPROVEMENT, ABILITY UTILIZATION)**
    Seeing the results of your efforts
    Using a variety of skills and talents

15. **ACHIEVEMENT, CHALLENGE, COMPETITION**
    To develop my skills and ability
    Because of the competition
    To learn what I am capable of

16. **KILLING TIME, AVOIDING BOREDOM**
    To keep busy
    To avoid boredom

17. **INTELLECTUAL AESTHETICISM**
    To use my mind
    To think about my personal values

Source: Crandall (1980:49)

most significant: "to have contact with nature;" "for personal fulfillment;" "for a sense of accomplishment;" and "for physical exercise." Of more secondary importance but still ranking moderately high were the motivations: "to fulfill civic duty;" "for solitude;" "to be with friends;" "to have some say about natural resource management" and "for the learning experience." Other motives showing little significance were: "to escape jobs or school pressure;" "to meet new people;" "to escape home or family pressure;" "because family volunteers;" "to fill up free time" and "to make contact leading to career."

Curnan *et al.* also asked open-ended questions about what activities volunteers liked most and liked least. Of five activities volunteers liked most, three of the categories were performed in the out-of-doors; 75 percent of the volunteers preferred these activities over the others. These consisted of trail maintenance (60 percent), construction (10 percent), and leading outings (5 percent). As Curnan *et al.* (1979:121) point out, "it is obvious that the enjoyment of working out-of-doors is an attribute sought after by trail volunteers." Activities liked least included: paperwork (31 percent), litter clean up (16 percent), meetings (15 percent), hard physical labour (12 percent), boring work (11 percent), and landowner contact (5 percent).

Volunteers were also asked the reasons why they started volunteering for the trail club. Again, "people's responses had to do with being outside" (Curnan *et al.*, 1979:121). In this regard, the top three reasons were: "started with hiking" (31 percent), "had a sense of obligation as a trail user" (16 percent) and "enjoy nature" (13 percent). These were followed by "asked by another volunteer" (12 percent), "previous experience with volunteer groups" (11 percent), "for a sense of accomplishment" (9 percent) and "concern for the environment" (4 percent).

Analysis of Curnan *et al.*'s (1979) study indicates a number of important implications for motivational research in trail voluntarism. It was evident in this study that certain motives or reasons for participation were more important than others. In this regard, the four most important reasons for participation seemed to be intrinsically motivated and motivated by a person's self-interest. These were "to have contact with nature," "for personal fulfillment," "for a sense of accomplishment," and "for physical exercise." Thus, the motives were directed toward rewards that were internal to the person and which would provide the person with feelings of self-determination and

competence. The motives of more secondary importance to volunteers seemed to be a combination of altruism and extrinsic motivation (e.g. "to fulfill civic duty," "to have some say about natural resource management") as well as self-interest and intrinsic motivation (e.g. "for solitude," "to be with friends," "for the learning experience").

It is also evident from the above findings that key motivational factors revolve around volunteers' involvement with the natural environment either in an aesthetic or outdoor recreational sense. For example, the variable "to have contact with nature" ranked highest of all reasons for participation. The findings on activities that were liked most and liked least also showed that the categories dealing with the outside environment were important to the volunteers. Similarly, the 'reasons for starting volunteering' findings also showed that many volunteers' initial interest arose from previous hiking experiences or interest in nature.

There is evidence to suggest that trail volunteers share some motives with other individuals and groups who are involved in hiking or wilderness recreation. A post hoc review and comparison of the motivations of trail volunteers (Curnan *et al.*, 1979), members of a hiking club (Bolduc, 1973), and individual hikers or wilderness recreationists (Driver, 1972; Hendee *et al.*, 1968; Iso-Ahola 1980; ORRRC 1962; Rossman and Ulehla 1977; Shafer and Mietz 1972; and Stankey, 1972) indicates that there are some similarities as well as some differences between the three types of people. [3] In general, this comparison indicates that although trail volunteers share many of the same self-interest needs as hiking club members and individual hikers (i.e. contact with nature, physical exercise, to be with friends), they also have their own unique altruistic needs (i.e. their needs to accomplish things, to fulfill civic duty and their concern for natural resource management).

[3] It should be noted that these comparisons have limited validity since the research instruments measuring the groups were not the same nor were the groups from the same geographic area.

III. METHODOLOGY AND THE TREATMENT OF THE DATA

A. Methodology

The methodology used in this study was the mail survey and the research instrument consisted of a self-administered questionnaire. The process and approach to the mail survey design followed the *total design method* (TDM) developed by Dillman (1978). Dillman's premise is that the mail survey can be used successfully if certain design steps are followed which are based on proven techniques. Basically, these steps are used to combat the problem of low response rates in mail surveys. The implementation process in the TDM is based on two premises. The first premise is that the design process must impart an effective appeal theme to potential respondents. The second notes that personalization is important in the design techniques and printed media. In this regard, this study placed a great deal of emphasis on developing a questionnaire and covering letter that promoted the personalization and appeal theme described above. In addition, an extensive follow-up mailing process was undertaken in order to further combat non-response.

In essence, this thesis can be considered a case study of three VTOs in Alberta. The primary reason for this designation is that it deals with a population of subjects (as opposed to a sample) and therefore makes no inferences to a larger population of trail volunteers.

B. The Instrument

A copy of the self administered questionnaire used in this study can be found in Appendix B. [4] The questionnaire was comprised of a composite of sections either taken or adapted from other instruments or studies (Crandall, 1980; Curnan *et al.*, 1979; Neulinger, 1981) or based on information gathered from literature reviews (Cox, 1981, 1982a, 1982b) or from interviews with trail organization executive directors or officers (Czypionka, 1981,1982:pers. comm.; Dejong, 1982:pers. comm.; Prior, 1982:pers. comm.; Skirrow, 1981, 1982:pers. comm.).

[4] It should be noted that the actual size of the questionnaire sent to the population was smaller than that shown in the Appendix. It measured approximately 7" X 8.5" and was stapled in a booklet format.

Two major concerns with any research instrument are the validity and reliability of the instrument. Babbie (1979:132) states that "validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration." Reliability, on the other hand, "is a matter of whether a particular technique, applied repeatedly to the same object, would yield the same result each time" (Babbie, 1979:129).

Mouly (1978) emphasizes that questionnaires must be validated prior to their use in a study. In this regard, it must address two areas of concern:

1. The rate of returns: does the questionnaire have sufficient appeal that a high percentage of returns can be expected?
2. The validity of the responses: does the questionniare relate to the problem; is it free of leading questions, ambiguity or irrelevent items? (Mouly, 1978:195)

Mouly (1978:195) suggests that the "answers to these questions . . . can be established only through repeated field testing and adjustment until the investigator is fully satisfied as to the adequacy of the questionnaire as a vehicle for eliciting valid responses."

Extensive pilot testing was undertaken on the instrument used in this study in the spring of 1983. Essentially, two drafts of the questionnaire were prepared and were subjected to pilot testing. A total of 22 subjects completed the questionnaire as part of the pilot testing of the instrument. These people consisted of undergraduate and graduate students, academic staff, members of the thesis committee, other interested individuals and a limited number of former trail volunteers. When the last draft was finalized, it was also completed by one member of the executive of each VTO as a final check on the readability, appeal, and relevancy of the instrument. Fortunately, these VTO executives found no problems and their questionnaires were able to be included as eligible responses in the study.

There is less concern with regard to the question of reliability in questionnaire survey research (Babbie, 1979; Mouly, 1978). This is due to the fact that questions are standardized and therefore all respondents receive essentially the same stimulus (Babbie, 1979). However, it is important that the questions are relevant and are worded clearly

and unambiguously in the first place to ensure that the measurement could in fact be repeated and obtain the same results (Babbie, 1979).

In addition to extensive pilot testing, a split-half reliability test was undertaken on two portions of the questionnaire. The first test covered all the five-point scales, including perceived freedom/constraint, intrinsic/extrinsic motivation, self-interest/altruism, and degree of enjoyment and frequency of participation. This yielded a reliability score of .81. The second test covered the five-point Likert scale for the thirty-eight reasons for continued volunteer participation and yielded a reliability score of .89.

In its entirety, the questionnaire included 96 items and on the average, took approximately one half hour to complete. There are five sections to the questionnaire addressing the first five subproblems of this thesis. These sections consist of: volunteer participation characteristics; leisure and volunteer activities; volunteer activities; reasons for continued volunteer participation; and characteristics of volunteers. Each of these sections and their contents are presented in the order they appear in the questionnaire and are briefly described below.

Volunteer Participation Characteristics

This section consisted of five questions which were designed to obtain information corresponding to the first subproblem. Specifically, it examined the amount of volunteer participation (number of years and number of hours per year), the social unit in which the volunteer participates, preferences for management or supervision, and reasons for starting volunteering. Apart from a limited number of modifications, these questions were derived from Curnan *et al.'s* (1979) questionnaire codebook.

Leisure and Volunteer Activities

The purpose of this section of the questionnaire was to obtain information relating to the fourth subproblem. It was designed to determine the enjoyment and motivational elements of trail volunteer participation in three types of activities: most enjoyed trail volunteer activity, least enjoyed trail volunteer activity and most enjoyed leisure activity. Open-ended questions were asked to find out which specific activity was enjoyed the most or least and the reasons why. In addition, a number of five-point scales were presented to measure the degree to which respondents felt perceived freedom or constraint, altruism or self interest, and intrinsic or extrinsic motivation. The open-ended questions were prepared by the author. The format of the scales was derived from Neulinger's (1981) self-administered questionnaire entitled *What Am I Doing* which addressed quality of lifestyles. In this questionnaire, he used similar scales to measure perceived freedom/constraint and intrinsic/extrinsic motivation. The wording on the scales used in this study, however, was made to conform with the expected polarities of feelings which volunteers might have towards their particular tasks. The scale on self-interest/altruism was based on a literature review (Cox, 1982a) which found that volunteers often have mixtures of these two types of motives.

Volunteer Activities

This section of the questionnaire examined six categories of tasks or activities usually found in volunteer trail organizations in order to determine enjoyment and motivational elements of trail volunteer participation. As such, it corresponded to the third subproblem of the thesis. Essentially, questions were asked as to whether the respondents participated in a particular activity or not. If they answered yes, they were directed to two scales which measured first, the degree of enjoyment they derived from the activity, and secondly, their perceived freedom or constraint in doing that activity. Apart from the perceived freedom/constraint scale which was adapted from

Neulinger's (1981) questionnaire (described earlier), these questions were prepared by the author. The types of activities and their specific examples were determined through interviews with trail organization executives and from a literature review (Cox, 1982b; Curnan *et al.*, 1979; Lautz, 1979; Richie, 1979).

Reasons for Continued Volunteer Participation

The purpose of this section was to determine the trail volunteers' specific reasons or motives for continued participation in trail voluntarism. This section corresponded to the fifth subproblem of the thesis. An extensive review of a number of questionnaires and research papers on voluntarism and outdoor recreation motivation was undertaken to obtain the thirty eight reasons for continued volunteer participation that are listed in this section (See in particular Cox, 1982a; Crandall, 1980; Curnan *et al.*, 1979). Interviews with the executive of three VTO's either provided additional reasons or verified those found in the literature review. Respondents were asked to rate the thirty eight reasons in terms of a five-point Likert scale ranging from "very untrue for me" to "very true for me". Two spaces were also provided in the questionnaire for open-ended responses which allowed respondents to write in any other reasons considered important to them.

Characteristics of Volunteers

This section examined the socio-economic and demographic characteristics of the respondents and as such, corresponds to the second subproblem of the thesis. The questions included in this section covered the variables of: sex, age, marital status, education, place of work and residence, employment status, occupation and income. Most questions were derived and adapted from the 1981 Census of Canada, the 1982 Edmonton Area Study and Dillman (1978).

C. The Subjects

The sample used in this study consisted of the entire population of the activist volunteer core of the three VTOs. The initial population included 128 volunteers - 37 from the GDTA, 47 from the TNF, and 44 from the WTA.

In order to determine the specific makeup of the population, the executive members of each VTO were asked to look at their membership lists to identify those people who belonged to the activist volunteer core. In this regard, it was necessary to specify to the executive certain criteria for inclusion of members in this population (Figure 4).

Executive members of all three VTOs cooperated in providing the names and addresses of active volunteers. In some cases however, the executive members were not certain whether certain VTO members could be considered active volunteers or not. In these cases, the author advised them to include these names on the list since it was felt that it was better to err on the side of including non-active volunteers than to exclude active volunteers.

D. Collection of the Data

After the names and addresses of the sample population were secured, the actual survey mailout took place. The mail survey design consisted of an initial mailout of questionnaires and two follow-up mailings (Appendix B). The initial mailout questionnaire package consisted of a covering letter, the questionnaire itself and a stamped return envelope. The covering letters for the first and second mailout were prepared on a word processor. This allowed for each name and address to be printed on the letter and provided an impression that each letter was an original. Each letter was also individually signed by the author.

The initial mailout package was sent in late June, 1983. One week later (in early July), a postcard was mailed to the sample population. This postcard served either as a

Figure 4

Criteria for the Selection of Survey Respondents

(or ~~Active~~ Volunteers)

There are a number of criteria necessary to determine the potential respondents to this survey. Would you please screen your membership lists to find those active volunteers who meet the following criteria:

1. WE ARE LOOKING FOR VOLUNTEERS WHO ARE ACTIVE AND CONSISTENTLY CONTRIBUTE THEIR TIME TO THE VOLUNTEER TRAIL ORGANIZATION. In other words, the choice of those to be included in the sample will be based on volunteers making themselves readily available when called upon, or actively coming out on their own accord. Therefore, it is not necessary that they volunteer a certain number of hours per year but they regularly volunteer when the perceived need arises.

2. THE VOLUNTEERS SHOULD BE THOSE WHO ARE CURRENTLY ACTIVE VOLUNTEERS IN THE ORGANIZATION - not those who volunteered in the past and can no longer be relied upon to contribute time to the organization.

3. ALL VOLUNTEERS WHO FIT THE ABOVE CRITERIA SHOULD BE INCLUDED: This therefore covers those families who may have a number of active volunteers who fit this criteria. In this case, all applicable names of active volunteer members in the family should be included.

4. IF IT IS KNOWN THAT ANY OF THE VOLUNTEERS MEETING THE ABOVE CRITERIA ARE UNDER 18, PLEASE INDICATE THIS BESIDE THE NAME ON THE LIST.

Please note that we require the full name, address and phone number of each of these volunteers.

Thank you for your cooperation.

reminder to complete the questionnaire or as a note of appreciation for already having completed one.

When the questionnaire returns first began to arrive, it became evident that a number of respondents were claiming that they were not active volunteers as noted in the covering letter. In addition, it also became evident that a number of others who had been included in the sample were not eligible because they had either moved away or had not participated for a number of years. A decision was made to eliminate these people from the population. It was also suspected at this time that some of the reason for non-response was that many individuals did not think that they were active volunteers. The second mailout attempted to resolve this problem as well as to encourage those who had not responded, to do so. It consisted of a shorter letter and a replacement questionnaire which was sent to those individuals who had not yet responded. This was sent out during the first week in August. While the covering letter again urged those non-respondents to complete and return the questionnaire, a postscript was added to this covering letter which directed those respondents who thought that they were not active volunteers to write this on the questionnaire and then return it to the author. The last questionnaire returns arrived during early September.

Of the original population of 128 volunteers, eighteen were eliminated for the reasons noted above. This left a revised population of 110 volunteers - 30 from the GDTA, 37 from the TNF and 43 from the WTA. In total, 87 eligible volunteers responded to the questionnaire - 23 from the GDTA, 26 from the TNF and 38 from the WTA. A total response rate of 79.1 percent was obtained for the revised populaton. The response rates for individual groups were 77 percent for the GDTA, 70 percent for the TNF and 88 percent for the WTA.

E. Analysis of the Data

Upon completion of the survey, a codebook was formulated and data was manually coded onto data sheets. This involved the assignment of codes to both closed and open-ended questions. The data were then entered onto the University of Alberta's Amdahl 5870 mainframe computer. With the use of the SPSSx computer program, descriptive statistics were obtained for all questions in the instrument. This included frequency counts, percentages, means and standard deviations for all data. Pearson product-moment correlations were also calculated for pairs of mean score variables on a number of motivational scales. T-tests were also undertaken to see if there were any significant differences between mean scores with respect to the six volunteer activity categories. In addition, the data concerning reasons for continued volunteer participation were subjected to factor analysis as well as tests to check the suitability of the factor analysis model.

Although the prime intent of the study was to determine the characteristics of the population as a whole, it was felt that the trail organizations themselves would want to know if their organizations differed from the norm or from each other. Therefore, it was decided to determine whether there were significant differences between the VTOs with respect to the variables that were studied. In this regard, chi-square tests were run on all applicable nominal data. Similarly, oneway analysis of variance tests were done on the interval data to check for VTO differences.

IV. RESULTS AND DISCUSSION - SOCIAL CHARACTERISTICS

A. Introduction

This chapter of the thesis examines the results of the study in terms of participation characteristics and socio-economic and demographic correlates of participation. This type of information provides an overview of some of the dynamics of trail volunteer participation and assists in understanding what segment of society that trail volunteers typically come from. In this regard, it is of interest to understand certain characteristics of volunteers' participation such as how much they volunteer, whether they prefer to lead or be led in their activities and with whom they participate. Finding out the socio-economic and demographic characteristics of volunteers provides information on aspects of their life cycle, their socio-economic status and where they work and reside. This is useful in trying to understand the type of people who make up VTOs and provides an insight as to how a person's position in the life cycle and society coincides with whether or not he/she is a volunteer.

B. Participation Characteristics

This section of the chapter presents information on characteristics of volunteer participation in the VTO's. It provides an analysis and interpretation of the responses to questions on the following topics:

1. . Amount of volunteer participation in the VTOs;
2. Leadership preferences;
3. Social unit of participation.

For each table in this section, a chi-square notation is provided which indicates whether there was a significant difference between the three VTOs with respect to the variable in question.

Amount of Volunteer Participation

Number of years. Table 1 indicates the number of years that respondents have spent as volunteers in their VTOs. In general, the table shows that the majority have been volunteers for a short period of time, with almost 60 percent (59.8 percent) having been volunteers for five years or less. Less than a third (32.1 percent) had volunteered for six to ten years and only 8 percent could be considered longer term volunteers, having participated between eleven and fifteen years. The mean number of years spent volunteering by members from the three organizations was 5.2.

A significant difference between the organizations was evident in the findings. However, these differences are likely due to the length of years that each organization has been in existence. The WTA had the longest term volunteers of all three groups with volunteers averaging 6.2 years of service with the organization. In addition, it was the only organization which had members that had been with the organization over ten years. These trends are likely due to the fact that the WTA is the oldest of the three organizations, having started in the late 1960's. Volunteers had been with the GDTA for an average of 5.6 years and with the TNF for an average of 3.5 years. Both of these groups were organized in the mid 1970's with the GDTA starting in 1974 and the TNF in 1976.

In their study of trail volunteers in the northeastern United States, Curnan *et al.* (1979) found that volunteers had actively belonged to trail clubs for an average of 12 years. It is likely that this higher figure reflects the fact that trail organizations in the northeastern U.S. have been in existence for many more years than the relatively young Alberta organizations.

Number of Hours Per Year. Table 2 indicates that relatively few volunteers contribute the greatest amount of time to the VTO in an average year. Using Curnan *et al.'s* (1979) terminology of "high frequency" and "low frequency" volunteers, less than one-quarter of the respondents (22.9 percent) could be considered high frequency

Table 1

Number of Years Spent Being a Volunteer in VTO

Years	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
1 - 5	11	47.8	21	80.8	20	52.6	52	59.8
6 - 10	12	52.1	5	19.2	11	29.0	28	32.1
11 - 15	--	--	-	--	7	18.4	7	8.0
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 16.15; d.f. = 4; $p < .05$

Table 2

Hours Spent Doing Volunteer Activities
in an Average Year

Hours	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
1 - 48	11	47.8	14	53.8	17	44.7	42	48.3
49 - 120	5	21.7	6	23.1	14	36.8	28	28.7
121 - 240	4	17.4	3	11.5	6	15.8	13	14.9
241 - 480	2	8.7	2	7.7	1	2.6	5	5.7
Over 480	1	4.3	1	3.8	-	--	2	2.3
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 4.85; d.f. = 8; $p > .05$; not significant

volunteers, having volunteered between 121 and 480 hours per year. In contrast, over three quarters (77.0 percent) were low frequency volunteers, contributing between 1 and 120 hours per year. There was no significant difference between the VTOs with respect to this variable.

These results are somewhat similar to Curnan *et al.'s* (1979) findings on trail volunteers. They found that 36 percent were high frequency volunteers and 64 percent were low frequency volunteers.

Leadership Preferences

Information pertaining to volunteers' preferences for leadership is presented in Table 3. In general, the findings indicate that slightly over half of the volunteers were willing to allow others to make decisions which they, in turn, were prepared to follow. In this regard, a total of 51.7 percent were either willing to follow instructions without supervision (37.9 percent) or with supervision (13.8 percent). The preference for following instructions without supervision suggests that volunteers still wish to maintain some form of autonomy in decision making. On the other hand, almost 46 percent preferred to either lead and coordinate (17.2 percent) or assist in coordinating volunteer activities (28.7 percent).

The results also indicated that there was a significant difference between the three VTOs with respect to this variable. In this regard, it was evident that the TNF volunteers showed a much greater preference for taking a coordination role in comparison to the other two VTOs.

In summary, the results show that almost half of these active volunteers preferred a leadership or coordination role in the organization. This may suggest that these people have either the necessary skills to be leaders and/or they have been drawn to the organizations because of the opportunities to take on management roles and responsibilities. Even though almost half of these active volunteers preferred these

Table 3

Leadership Preferences

Preferences	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Follow without Supervision	12	52.2	1	3.8	20	52.6	33	37.9
Assist in Coordination	5	21.7	9	34.8	11	28.9	25	28.7
Lead and Coordinate	4	17.4	7	26.9	4	10.5	15	17.2
Follow with Supervision	2	8.7	7	26.9	3	7.9	12	13.8
Other	-	--	2	7.7	-	--	2	2.3
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 23.80; d.f. = 8; p< .05

Table 4

Person(s) with Whom the Volunteer Normally Participates

Type of Persons	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Alone	3	13.0	10	38.5	12	31.6	25	28.7
Other Members	4	17.4	8	30.8	13	34.2	25	28.7
Spouse	4	17.4	1	3.8	7	18.4	12	13.8
Spouse/Rel. & Members	1	4.3	2	7.7	3	7.9	6	6.9
Other	2	8.7	1	3.8	3	7.9	6	6.9
Other Relative	4	17.4	1	3.8	-	--	5	5.7
Friends	2	8.7	2	7.7	-	--	4	4.6
Spouse/Rel. & Friends	3	13.0	1	3.8	-	--	4	4.6
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 24.13; d.f. =14; p< .05

leadership roles, they still represent a relative minority with respect to the entire membership of each organization (including both active and inactive members). This tendency towards oligarchical control or minority rule in voluntary associations is supported by the literature (Blau and Scott, 1962; Michels, 1959).

Social Unit of Participation

Table 4 presents the results which indicate the person(s) with whom the respondents normally volunteer when they participate in activities or tasks of the VTO. In total, just over one quarter of the respondents (28.7 percent) indicated that they participate alone. In contrast, the rest of the volunteers (71.3 percent) participated with other people such as other members (28.7 percent), their spouses (13.8 percent), other relatives (5.7 percent), friends (4.6 percent) or some combination of these people (11.5 percent).

Curnan *et al*. (1979) found somewhat different results in that 55 percent of their sample of trail volunteers participated alone. It is worth noting, however, that there was a significant difference between the three VTOs. In this regard, two of the organizations showed fairly high proportions of people participating alone. In particular, 38.5 percent of the TNF volunteers and 31.6 percent of the WTA volunteers participated by themselves as opposed to only 13.0 percent of the GDTA who participated alone.

Studies have shown that people normally participate in recreation activities within kinship or friendship groups whereas during work activities, they normally participate alone (Cheek and Burch, 1976). In the case of the VTOs in this study, around 40 percent of the trail volunteers participated with either friends or with kin. With respect to the friends category, volunteers could either be participating with friends that they have known prior to joining or those they have met as a result of participation. Either way, these findings suggest that these people see their participation as a way of being with other people they enjoy being with socially. In the case of kinship, people may view

times spent with relatives as a chance to renew relationships and participate together in potentially meaningful activities.

C. Socio-Economic and Demographic Correlates of Participation

The topics examined in this section are:

1. Life Cycle Variables
   a. Age
   b. Sex
   c. Marital Status
2. Socio-Economic Status
3. Residential Variables
   a. Size of Community
   b. Urban versus Rural Differences

Chi-square notations are provided in each table within this section, indicating if there is a significant difference between VTOs with respect to the variable in question.

Life Cycle Variables

Age. Table 5 presents data on the trail volunteers' age. In general, the results indicate a curvilinear (inverted U-shape) relationship with participation highest in the middle age groups (30-59) and lowest in the youngest (under 30) and oldest (over 59) age groups. When compared to the 1981 census data for Alberta (Statistics Canada, 1982), it is evident that the middle age groups in this study are overrepresented and the younger age groups are underrepresented. Just over 72 percent of the respondents in the current study are in the 30-59 age group, while only 33 percent of the census population fall into this age range. In addition, only 16.3 percent of the respondents in the current study are under 29 whereas in the census population, 56 percent are in this age range.

Table 5

Volunteers' Age

Age	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Under 18	1	4.3	1	3.8	-	--	2	2.3
18 - 29	10	43.5	2	7.7	-	--	12	14.0
30 - 39	8	34.8	7	19.2	9	24.3	22	25.6
40 - 49	1	4.3	7	26.9	11	29.7	19	22.1
50 - 59	2	8.7	6	23.1	13	35.1	21	24.4
60 - 69	1	4.3	4	15.4	3	8.1	8	9.3
70 and over	-	--	1	3.8	1	2.7	2	2.3
No Response	-	--	-	--	1	missing	1	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 34.11; d.f. = 12; $p < .05$

Table 6

Volunteers' Sex

Sex	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Male	16	69.6	17	65.4	23	62.2	56	65.1
Female	7	30.4	9	34.6	14	37.8	30	34.9
No Response	-	--	-	--	1	missing	1	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 0.34; d.f. = 2; $p > .05$; not significant

The findings in the current study with respect to age are consistent with the results of most other studies in the literature. As Tomeh (1973:97) suggests, the pattern shows "an increase in membership as the person passes through adolescence, young adulthood, and adulthood, until fifty or sixty years of age, when membership begins to decline." These findings also concur with studies done on other outdoor recreation organizations and VTO's which also suggest that these type of people are likely to be middle aged (Bolduc, 1973; Curnan *et al.*, 1979; Harry *et al.*, 1969). Curnan *et al.'s* (1979) study, for example, found most volunteers to fall between the ages of 40 and 69 years with the greatest percentage in their fifties.

The findings also show that there was a significant difference between the three VTO's even though in each case the trend was toward a curvilinear relationship with respect to age. It was evident that the GDTA had the youngest members of the three organizations with almost 50 percent of its volunteers (47.8 percent) under 30 years of age. The peak age group in this VTO was the 18-29 category which comprised 43.5 percent of the organization's volunteers. The TNF tended to have somewhat older volunteers with its peak percentage (26.9 percent) in the 40-49 age group. The WTA had the oldest volunteers of the three VTO's with 35.1 percent in the 50-59 age category. The WTA's age breakdown was the most similar to the findings of the Curnan *et al.* (1979) study on trail volunteers.

It would appear that trail voluntarism is a middle age phenomena at least with respect to the TNF and WTA. The GDTA has younger volunteers in its ranks, with most being under age 40. All three organizations exhibit curvilinear trends with respect to age and this concurs with most studies done on volunteer participation.

Sex. Table 6 shows that the majority of respondents were male (65.1 percent) whereas females made up 34.9 percent of the population. There was no significant difference between trail organizations in this regard.

When compared to the 1981 census figures for Alberta (Statistics Canada, 1982), it is evident that men are overrepresented and females are underrepresented in the current study. In this regard, the census figures indicate that 51 percent of the population are male compared to 65.1 percent in this study and 49 percent are female compared to 34.9 percent in this study.

These findings are consistent with other studies in the literature where it has been found that men predominate in sport, outdoor recreation and environmental organizations. Both Bolduc (1973) and Slack (1979) believe that this lower participation rate by women may be due to early socialization patterns since sport and outdoor recreation activities have been traditionally male oriented. In addition, Bolduc (1973) suggests that some women may be prohibited from participation because of familial responsibilities such as taking care of children.

Marital Status. The results presented in Table 7 indicate that the majority of respondents were married (70.9 percent) as compared to being single (19.8 percent), divorced (5.7 percent), widowed (1.2 percent) or living common-law (2.3 percent). No respondents indicated they were separated. Individual differences in the VTO's were evident, however, particularly with respect to the GDTA. In this VTO, there was an equal split between married (47.8 percent) and single respondents (47.8 percent) with only 4.3 percent living common-law. These results are likely a reflection of the younger age of the trail volunteers in this VTO. Similarly, the predominance of marrieds (81.1 percent) versus singles (5.4 percent) in the WTA may also reflect the older ages of these volunteers.

In comparison to the 1981 census figures for Alberta (Statistics Canada, 1982), there is a greater percentage of respondents who are married and living common-law in the current study (73.2 percent) than there is in the census data (47 percent). Single people make up 46 percent of the census population whereas they make up only 19.8 percent of the respondents in this study. The figures for the other marital status

Table 7

Volunteers' Marital Status

Marital Status	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Married	11	47.8	20	76.9	30	81.1	61	70.9
Single	11	47.8	4	15.4	2	5.4	12	19.8
Divorced	-	--	1	3.8	4	10.8	22	5.7
Common-Law	1	4.3	-	--	1	2.7	19	2.3
Widowed	-	--	1	3.8	-	--	21	1.2
No Response	-	--	-	--	1	missing	1	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 22.11; d.f. = 8; p< .05

categories are more similar to one another with 7 percent of the census population being divorced, widowed or separated as compared to 6 percent in this study.

This trend for trail volunteers to be married is widely supported in the literature on volunteer organizations in general, as well as studies that have been done on sport, outdoor recreation, and environmental organizations.

Summary. An examination of the life cycle variables suggests that trail volunteers may be profiled as middle aged married persons who are more likely to be male than female. However, when individual organizations were examined, the GDTA was an exception to this trend. Most of these volunteers were considerably younger than their counterparts in the other two organizations and this was also reflected in the fact that almost half of them were single. This finding may suggest that younger people are attracted to the GDTA because of its particular functions and interests. However, it also indicates that trail volunteers may in fact be recruited from many different stages of the adult life cycle.

Socio-Economic Status

Income. Tables 8 and 9 present information on personal income and total family income. The results for all groups show a curvilinear (inverted U-shape) relationship with most people being in the middle income ranges of the table whereas fewer were in the lower and higher income ranges. This trend occurred in both income tables even though there was a higher frequency of respondents in the lower income ranges in the personal income results whereas there were more respondents in higher ranges in the family income results. In both tables, approximately 44 percent had incomes of between $25,000 and $45,000. These results are similar to those found in the Curnan *et al.* (1979) study. There was no significant difference between trail groups with respect to this variable.

Table 8

Volunteers' Personal Income

Income Level $	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Under 5,000	5	21.7	1	4.0	3	8.1	9	10.6
5,000 - 24,999	7	30.4	5	20.0	10	27.0	22	25.9
25,000 - 44,999	6	26.0	13	52.0	19	51.3	38	44.7
45,000 - 64,999	4	17.3	4	16.0	3	8.1	11	12.6
65,000 and over	1	4.3	2	8.0	2	5.4	5	5.9
No Response	-	--	1	missing	1	missing	2	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 8.42; d.f. = 8; p> .05; not significant

Table 9

Volunteers' Total Family Income

Income Level $	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Under 5,000	1	4.3	-	--	-	--	1	1.2
5,000 - 24,999	5	21.7	3	12.5	2	5.6	10	12.0
25,000 - 44,999	8	34.8	10	41.6	18	50.0	36	43.4
45,000 - 64,999	3	13.0	7	29.1	13	36.1	23	27.7
65,000 and over	6	26.0	4	16.7	3	8.4	13	15.6
No Response	-	--	2	missing	2	missing	4	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 12.00; d.f. = 8; p> .05; not significant

When compared to the 1981 census figures for Alberta (Statistics Canada, 1984, 1985), it is evident that the respondents in the current study had a higher level of income for both personal and family income. Whereas the majority of respondents (63.2 percent) had personal incomes over $25,000 in the current study, only 17 percent of the census population had personal incomes over $25,000. Similarly, with family income, 86.7 percent of the respondents in the current study, as compared to 55 percent of the census populaton, had family incomes over $25,000. In addition, the average personal income for the census figures was $14,691 as compared to the average income range of $25,000 to $34,999 for the current study. For total family income, the average income for the census figures was $30,390 whereas in the current study, the average income range was $35,000 to $44,996. In general, these comparisons suggest that trail volunteers have a higher than average personal and family income, although for the latter income category, this tendency is not as highly pronounced.

Education. The trail volunteers in this study tend to be a well educated group with over 80 percent having done some post secondary training (Table 10). Just over 60 percent had some university training and of these, approximately 24 percent had done some university graduate work. There was no significant difference between the VTOs with respect to education.

When compared to the 1981 census figures for Alberta (Statistics Canada, 1984), it is evident that the university educated respondents in the current study are highly overrepresented. In this regard, 60 percent of the respondents in the current study have some university education as compared to only 18 percent of the census population.

These findings are supported by the voluntarism literature and by the research done on the membership of hiking clubs and VTOs (Bolduc, 1973; Curnan *et al.*, 1979). In general, it would appear that trail volunteers represent a highly educated group of

Table 10

Volunteers' Education

Education	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
Elem/Jr. High	1	4.3	1	3.8	-	--	2	2.3
High School	1	4.3	8	30.8	5	13.5	14	16.3
College/Voc/Tec/Nurs	3	12.9	4	15.4	11	29.7	18	20.9
University	12	52.2	6	23.1	13	35.1	31	36.0
Univ. Graduate Work	6	26.1	7	26.9	8	21.6	21	24.4
No Response	-	--	-	--	1	missing	1	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 12.59; d.f. = 8; p> .05; not significant

Table 11

Volunteers' Employment Status

Employment Status	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
Employed Full Time	17	73.9	18	72.0	28	80.0	63	75.9
Retired	1	4.3	4	16.0	4	11.4	9	10.8
Employed Part Time	4	17.4	2	8.0	2	5.7	8	9.6
In School	1	4.3	1	4.0	-	--	2	2.4
Unemployed	-	--	-	--	1	2.9	1	1.2
No Response	-	--	1	missing	3	missing	4	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 6.56; d.f. = 8; p> .05; not significant

people.

Employment Status. The results in Table 11 show that in total, over three quarters of the volunteers were employed full time. The next two categories of any importance were the retired (10.8 percent) and the part time employees (9.6 percent). Only 1 percent of these volunteers were unemployed which is different from Curnan *et al.'s* (1979) results which found that almost 27 percent of the respondents were unemployed. There was no significant difference between VTOs with respect to employment status.

In comparison to the 1981 census figures for Alberta (Statistics Canada, 1985), there appeared to be more people who were employed (i.e. full-time and part-time) in the current study (85.5 percent) than in the census population (69 percent). Apart from the Curnan *et al.* study noted above, these findings are generally supported in the literature.

Occupation. Trail volunteers were most likely to come from either the Professional and Technical (43.5 percent) or the Managerial (34.6 percent) occupations (Table 12). In total, these two white collar occupational groupings represented over 78 percent of the volunteers. In comparison, the 1981 census figures for Alberta (Statistics Canada 1985) showed that only 25 percent of the population belonged to these two occupational categories. These figures indicate there was a strong propensity for trail volunteers to have white collar occupations.

The findings concerning occupation are highly supported by the literature which suggests that the white collar occupations are most often represented in volunteer associations in general and more specifically, within hiking clubs and VTOs. For example, Curnan *et al.* (1979) found that people in white collar occupations made up approximately 87 percent of their sample.

A significant difference was found between the groups with respect to occupation. It was evident for the GDTA and WTA that most respondents had

Table 12

Volunteers' Occupation

Occupation	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
Professional & Technical	13	59.0	7	30.4	17	51.6	37	47.3
Managerial	3	22.7	4	52.2	10	30.3	27	34.6
Clerical	-	--	1	4.3	4	12.1	5	6.4
Service	2	9. 1	-	--	-	--	2	2.6
Sales	1	4.5	1	4.3	-	--	2	2.6
Transport & Equipment	-	--	2	8.7	-	-	2	2.6
Craftsmen & Production	-	--	-	--	2	6.0	2	2.6
Primary	1	4.5	-	--	-	--	1	1.3
No Response	1	missing	3	missing	5	missing	9	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 27.21; d.f. = 14; p< .05

Table 13

Volunteers' Industry

Industry	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
Community, Business & Personal Services	9	40.8	10	43.4	11	35.5	30	39.4
Transport., Commun. & Other Utilities	1	4.5	6	26.0	7	22.6	14	18.4
Public Administration	5	22.7	2	8.7	6	19.4	13	17.1
Mines, Quarries & Oil	4	18.2	-	--	1	3.2	5	6.6
Manufacturing Industry	2	9.1	2	8.7	1	3.2	3	3.9
Trade	-	--	1	4.3	2	6.5	3	3.9
Construction Industry	-	--	1	4.3	1	3.2	2	2.6
Finance, Insurance & Real Estate Industry	-	--	1	4.3	1	3.2	2	2.6
Agriculture	-	--	-	--	1	3.2	1	1.3
Forestry	1	4.5	-	--	-	--	1	1.3
No Response	1	missing	3	missing	7	missing	11	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 19.48; d.f. = 18; p> .05; not significant

occupations that could be categorized as professional or technical whereas in the TNF, most respondents had occupations in the managerial category.

Industry. Table 13 shows that almost 40 percent of trail volunteers worked in the service industry (made up of community, business and personal services). Other relatively important industries included the transportation/communication industry (18.4 percent) and public administration (17.1 percent). When compared to the 1981 census figures for Alberta (Statistics Canada 1985), it was apparent that there was a slight overrepresentation of these three industries in the current study. Comparable figures in the census data were 28 percent for community, business and personal services; 8 percent for transportation and communication; and 7 percent for public administration. There was no significant difference between the three VTOs with respect to the industry variable. No specific literature was found that related voluntarism to the various types of industry.

Summary. The socio-economic variables examined in this section lend additional support to the premise that voluntarism is a middle class, white collar phenomenon. There was a greater likelihood for trail volunteers to be well educated individuals with above average incomes and employed in professional, technical and managerial occupations. The combination of these results indicate that trail voluntarism is positively related to socio-economic status (SES). As such, the findings are strongly supported by the general voluntarism literature as well as the research specifically on hiking and trail organizations.

Residential Variables and Place of Work

Urban versus Rural and Size of Community. The findings in Table 14 indicate that trail volunteers in Alberta generally reside in urban areas (83.8 percent) as opposed to rural areas (12.9 percent). The provincial breakdown of statistics from the 1981 Canadian Census indicates that 22.8 percent of the Alberta population had rural

Table 14

Place of Residence

Place of Residence	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
Large City	18	78.3	9	34.6	30	81.1	57	66.3
Town	3	13.0	4	15.4	2	5.4	9	10.5
Small City	1	4.3	2	7.7	3	8.1	6	7.0
Rural Farm	-	--	5	19.2	1	2.7	6	7.0
Rural Non Farm	-	--	4	15.4	-	--	4	4.7
Village	-	--	1	3.8	-	--	1	1.2
Other	1	4.3	1	3.8	1	2.7	3	3.5
No Response	-	--	-	--	1	missing	1	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 27.45; d.f. = 12; p< .05

Table 15

Place of Work

Place of Work	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
Large City	17	77.3	11	50.0	30	93.8	58	76.3
Town	1	4.5	8	36.4	1	3.1	10	13.2
Small City	-	--	3	13.6	1	3.1	4	5.3
Other	3	13.6	-	--	-	--	3	3.9
Rural Non Farm	1	4.5	-	--	-	--	1	1.3
No Response	1	missing	4	missing	6	missing	11	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 30.15; d.f. = 8; p< .05

residences whereas 77.2 percent had urban residences (Alberta Bureau of Statistics, 1983). These two sets of figures suggest that there is not a great deal of difference between the census figures and those of the current study.

The results also indicated that for size of community, 73.3 percent resided in cities, 10.5 percent resided in towns and 1.2 percent resided in villages. A comparison with the 1981 census figures for Alberta (Alberta Bureau of Statistics, 1983) shows very little difference between the figures in the current study and the census data. The comparable census figures were 62.2 percent residing in cities, 14.6 percent residing in towns and 2.2 percent residing in villages.

The general voluntarism literature indicates conflicting results concerning residential variables. However, the studies on volunteers in sport, outdoor recreation, environmental and trail organizations indicate a definite tendency for volunteers to live in urban areas, particularly in large cities (Beamish, 1978; Bolduc, 1973; Curnan *et al.*, 1979; Hendee *et al.*, 1968).

In terms of individual differences amongst organizations, the TNF accounts for virtually all of the volunteers from rural areas and many of the volunteers from small towns. This is likely due to the fact that the TNF is largely based in the town of Athabasca and draws on volunteers from surrounding towns and rural areas.

Place of Work. Similar to the findings on place of residence, Table 15 shows that 81.6 percent of volunteers work in cities, in contrast to 13.2 percent who work in towns. This is consistent with Curnan *et al.'s* (1979) study. Again, the TNF was an exception to the norm and accounted for most of the volunteers who worked in towns. As noted above, this is attributable to the fact that much of its activity is based in the town of Athabasca and other surrounding communities.

Summary. The findings generally indicate that both place of residence and work are largely urban oriented for the trail volunteers in this study. Most trail volunteers also live and work in cities rather than in other smaller communities. This is largely supported

by the literature on recreation, sport and trail volunteers. These findings may also be partially accounted for by the fact that all three organizations are based in urban centres. The great majority of GDTA and WTA volunteers live and work in large cities. In contrast, the TNF volunteers are more evenly divided between living in a variety of urban and rural settings. They were also more likely than volunteers of the other organizations to work in towns or small cities. This was attributed to the fact that much of the TNF activity is centred in the town of Athabasca and the organization draws on volunteer support from the surrounding area.

However, when reviewing these findings on the residential variables, it should be noted that the figures concerning urban/rural differences and size of community do not differ appreciably from the census figures for Alberta. Based on this, no conclusions can be drawn concerning any significant tendencies respecting residential variables.

The socio-economic and demographic correlates described in this chapter have provided information on the social background of active volunteers in VTOs. Neulinger (1981) cites Cherry (1976), who believes that the usefulness of socio-economic variables has been in finding out what societal groups are most likely to participate in certain types of activities. However, he notes that this type of information "shed[s] little light on why individuals engage in the activities they do, or on such matters as the quality of the individual experience" (Cherry, 1976 as cited by Neulinger, 1981:85). Kelly (1980) also questions the success of demographic studies that have tried to predict leisure and recreation participation on the basis of identified population aggregates. Neulinger (1981) notes that increasingly, leisure research is moving towards an emphasis on understanding motivation and choices in leisure participation. He believes that this reflects a more humanistic approach to leisure planning and management.

Apart from the Curnan *et al.* (1979) study, no other known research has been undertaken on the motivations of volunteers in VTOs. The next chapter will look at the results of the study pertaining to volunteer motivation and will attempt to ascertain why

they participate in volunteer activities, the activities they enjoy and dislike and the reasons they start and continue volunteering.

V. RESULTS AND DISCUSSION - MOTIVATION

A. Introduction

This chapter presents results pertaining to the various facets of trail volunteer motivation. In this regard, the study attempted to determine why volunteers participated in various activities and the degree to which they found the activities to be leisure or non-leisure. In addition, it examined the reasons why people first started volunteering for their VTO and why they continue to volunteer.

No studies on voluntarism have been found that have examined volunteer motivation in terms of specific types of activities within an organization. It was felt that this approach would provide a greater understanding of the tasks and pursuits that people enjoy and dislike and some of the reasons why they participate in them. It would also provide information as to whether people experience their activities as leisure or non-leisure. This approach underlined a belief that volunteer participation is a multi-faceted phenomenon wherein some activities are freely chosen and enjoyed for their own sake whereas others present more of an obligation and may have some undesirable qualities. Further, these types of activities can exist together in an organization and more than one activity can be participated in by a single individual. By researching the motivational elements of individual activities, it was felt that a more precise theoretical description of volunteer motivation could emerge.

The investigation into reasons for starting and continuing to volunteer sought to understand the most important motives for volunteer participation. Much of the voluntarism research in this area has found a number of reasons for participation but few that are priorized in importance. This type of investigation would determine the relative importance of various reasons that first get trail volunteers interested and keep them dedicated to the organization.

The organization of this chapter includes a section on motivation in six types of volunteer activities followed by a section on motivation in preferred and disliked volunteer activities and a section on reasons for volunteer participation. Each of these sections outlines the results and then a final section compares the findings against the applicable propositions which were outlined in Chapter One.

On most tables in this chapter, there are notations indicating the results of a chi-square test or oneway analysis of variance test. These tests were undertaken to determine whether there were any significant differences between the three VTOs. In some tables, these tests were not undertaken either because of the limited number of respondents answering the question or because of the low numbers within applicable cells in the table.

B. Motivation in Six Types of Volunteer Activities

Introduction

This section of the chapter presents the results of the questions asked on six types of volunteer activities or tasks. These activities were: administration; research, planning and design; outings and events; publicity; liaison and negotiation; trail and facility construction and maintenance. The following topics are covered in this section:

1. Amount of Participation in Activities
2. Level of Enjoyment and Perceived Freedom in Activities

Amount of Participation in Activities

Table 16 provides information on whether or not volunteers participated in each of six categories of volunteer activities or tasks. It shows that the majority of trail volunteers participated in those activities associated with the main mandate of VTO's - trail construction and maintenance (71.4 percent) and outings and events (66.3 percent).

Table 16

Those Answering "Yes" to Participation in Volunteer Activity Categories[1]

Activity Category	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Construction/Maintenance	18	78.3	7	26.9	35	94.6	60	71.4
Outings/Events	11	47.8	20	83.3	24	66.7	55	66.3
Administration	10	43.5	17	68.0	18	48.6	45	52.9
Publicity	10	43.5	13	52.0	13	37.1	36	43.4
Research	9	39.1	10	38.5	11	29.7	30	34.9
Liaison	8	34.8	9	37.5	5	13.5	22	26.2

Chi-square = 18.30; d.f. = 10; $p < .05$

[1] Respondents could indicate participation in more than one activity.

Slightly over half (52.9 percent) of the trail volunteers participated in administration activities. The other categories of activities - publicity (43.4 percent), research (34.9 percent) and liaison (26.2 percent) were participated in by fewer volunteers.

When examining the separate VTO's, however, there were a number of individual differences. In particular, few volunteers (26.9 percent) in the TNF tended to participate in trail construction and maintenance as compared to the majority of volunteers in the GDTA (78.3 percent) and the WTA (94.6 percent) who did. This can be explained by the fact that the TNF has paid summer trail crews who undertake much of their trail work. Instead, the greatest number of volunteers in the TNF were involved in outings and events (83.3 percent) and administration (68.0 percent). In comparison to the other activity categories, the percentage of volunteer participation in trail construction and maintenance was high for the GDTA and WTA. This is particularly notable in the GDTA where there was a definite drop in participation from the first ranked trail construction and maintenance (78.3 percent) to the second ranked outings and events (47.8 percent). More volunteers were involved in trail construction and maintenance (94.6 percent) as well as outings and events (66.7 percent) in the WTA as compared to the GDTA. A probable explanation for this is that the WTA has regularly scheduled trail hikes and outings whereas the GDTA's outings are more sporadic.

Level of Enjoyment and Perceived Freedom in Activities

This section contains information on the degree to which respondents felt enjoyment and perceived constraint / freedom when participating in volunteer activities.[5] Table 17 presents the results pertaining to the level of enjoyment in each of the six activity categories. The mean scores in this table are based on responses to a five point Likert scale ranging from "not at all" (=1) to "very much" (=5). Table 18 lists the six

[5]It should be noted that respondents could not answer any questions concerning level of enjoyment and perceived freedom unless they indicated that they currently participated in the activity (as outlined in the previous section).

Table 17

Mean Scores and Standard Deviations of Enjoyment in Volunteer Activity Categories[1,2]

Activity Category	GDTA M	GDTA S.D.	TNF M	TNF S.D.	WTA M	WTA S.D.	Total M	Total S.D.
Construction/Maintenance	4.6[a]	0.6	3.7[b]	1.2	4.5	0.7	4.4[x]	0.8
Research	4.6	0.7	3.8	1.0	4.6	0.5	4.3	0.8
Outings/Events	4.6	0.5	3.6	1.1	4.1	0.8	4.0	0.9
Liaison	4.1	1.2	3.6	0.7	4.0	0.8	3.9	0.9
Administration	3.8	0.9	3.7	0.8	3.8	1.1	3.8[y]	0.9
Publicity	3.7	0.7	3.6	1.2	4.0	1.3	3.8[y]	1.1
Mean Enjoyment	4.2		3.7		4.2		4.0	

[1] If subscripts (x,y) are different, the Activity Category means are different according to t-test results.

[2] If subscripts (a,b) are different, the VTO means are different according to the Scheffe post hoc test, significant at $p < .05$.

Table 18

Mean Scores and Standard Deviations of Level of Perceived Constraint/Freedom in Volunteer Activity Categories[1,2]

Activity Category	GDTA M	GDTA S.D.	TNF M	TNF S.D.	WTA M	WTA S.D.	Total M	Total S.D.
Construction/Maintenance	4.5[a]	0.6	3.3[b]	1.0	4.3[a]	0.8	4.2[x]	0.9
Research	4.1	1.3	4.0	1.3	4.4	0.5	4.1	1.1
Outings/Events	4.5	0.5	3.7	1.3	3.9	1.0	4.0	1.0
Liaison	4.0	1.5	3.9	0.8	3.5	1.3	3.8	1.2
Administration	3.4	1.5	3.4	1.2	3.9	1.1	3.6[y]	1.2
Publicity	3.7	1.2	3.4	1.4	3.5	1.3	3.5[y]	1.2
Mean Perceived Freedom/Constraint	4.0		3.6		3.9		3.9	

[1] If subscripts (x,y) are different, the Activity Category means are different according to t-test results.

[2] If subscripts (a,b) are different, the VTO means are different according to the Scheffe post hoc test, significant at $p < .05$.

categories in rank order by their mean scores for level of perceived constraint/freedom (I feel compelled=1; I want to do it=5).

In terms of the total mean scores for level of enjoyment, all activities had a relatively high level of enjoyment with mean scores ranging from 3.8 to 4.4 (Table 17). The activity category of trail construction and maintenance ranked highest ($\underline{M}$=4.4) closely followed by research ($\underline{M}$=4.3). Administration and publicity ranked lowest, each with mean scores of 3.8.

A similar trend was observed with the total mean scores for the measure of perceived constraint/freedom (Table 18). The ranking of the six activities are identical in this table as compared to the enjoyment table. However, in this case, the mean scores for the most part are slightly lower (ranging from 3.5 to 4.2).

T-tests were conducted on the total figures in Tables 17 and 18 to determine if there were any significant differences among the six activities. For level of enjoyment, the tests revealed significant differences between construction/maintenance and publicity, $t = -2.14$, 20 d.f., $p < .05$ and between construction/maintenance and administration, $t = -2.94$, 26 d.f., $p < .01$. For level of perceived constraint/freedom, there were similar results with significant differences between construction/maintenance and publicity, $t = -1.81$, 20 d.f., $p < .10$ and between construction/maintenance and administration, $t = -1.73$, 26 d.f., $p < .10$. As can be seen, the same activities showed significant differences for both level of enjoyment and perceived constraint/freedom even though for the latter, the level of significance was not as strong.

Oneway analysis of variance tests were also conducted on the data in Tables 17 and 18 to see if there were any significant differences between VTOs. For level of enjoyment, the test revealed significant differences between the GDTA and TNF for construction/maintenance, $F(2,52) = 3.50$, $p < .05$. With respect to level of perceived constraint/freedom, the results showed significant differences between the GDTA and

TNF and between the WTA and TNF with respect to construction/maintenance, $F(2,52) = 4.50$, $p < .05$.

The results were also analyzed to obtain an overall mean for all activity categories under a single VTO. In this regard, mean enjoyment scores and mean perceived constraint/freedom scores were calculated for each VTO (Tables 17 and 18). These scores provide a general idea of the level of enjoyment or perceived constraint/freedom exhibited in the VTO as a whole. The GDTA and WTA both exhibited a mean enjoyment score of 4.2 as compared to the TNF which showed a lower score of 3.7. Similarly, the perceived constraint/freedom scores for the GDTA and WTA were 4.0 and 3.9 respectively as compared to 3.6 for the TNF. These findings may indicate that TNF volunteers have a lower level of satisfaction with the activities provided in their VTO as compared to their counterparts in the GDTA and WTA.

Because of the apparent similarity between the ranking and scores in Tables 17 and 18, it was decided to investigate whether or not enjoyment and perceived constraint/freedom were correlated. Pearson product-moment correlation coefficients were calculated for pairs of total mean scores for level of enjoyment and for perceived constraint/freedom (Table 19). The results indicated significant positive coefficients ranging in strength from .56 to .84. When all six coefficients were averaged, the mean coefficient was .71. This suggests that there is a relatively strong positive relationship between enjoyment and perceived constraint/freedom for the six activities.

The mean scores for Tables 17 and 18 showed that on the whole, trail volunteers have a relatively high level of enjoyment and a positive degree of perceived freedom for the six activities. However, the standard deviations also indicate some degree of variability, particularly for the lowest ranking mean scores on the two tables. It was therefore decided to examine a breakdown of the percentages for the enjoyment and perceived constraint/freedom scales to see if there were any activities in which people found perceived constraint or lower levels of enjoyment. Table 20 suggests that

Table 19
Correlation Between Mean Scores for Enjoyment and Perceived Constraint/Freedom in Volunteer Activity Categories

Variable Pairs	Pearson r	Sig.*
Const/Maint.	.70	p < .001
Research	.56	p < .003
Outings/Events	.84	p < .001
Liaison	.64	p < .003
Administration	.77	p < .001
Publicity	.74	p < .001
Mean Coefficient	.71	

*Two tailed test

Table 20

Percentages for Level of Enjoyment for Volunteer Activity Categories for Three VTOs

Activity Category	Not At All 1	2	3	4	Very Much 5	N
Construction/Maint.	–	1.8	12.7	27.3	58.2	55
Research	–	3.8	11.5	34.6	50.0	26
Outings/Events	2.3	--	27.3	31.8	38.6	44
Liaison	–	5.3	31.6	31.6	31.6	19
Administration	–	11.6	20.9	46.5	20.9	43
Publicity	6.1	--	36.4	27.3	30.3	33

Table 21

Percentages for Level of Perceived Constraint/Freedom for Volunteer Activity Categories for Three VTOs

Activity Category	I Feel Compelled 1	2	3	4	I Want To 5	N
Construction/Maint.	--	3.6	16.4	32.7	47.3	55
Research	--	15.4	3.8	30.8	50.0	26
Outings/Events	2.3	4.5	27.3	27.3	38.6	44
Liaison	5.3	5.3	26.3	26.3	36.8	19
Administration	4.8	21.4	9.5	35.7	28.6	43
Publicity	6.1	15.2	27.3	21.2	30.3	33

only a few respondents felt lower levels of enjoyment. However, Table 21 shows higher percentages of people registering perceived constraint. In particular, 26.2 percent of those participating in administration and 21.3 percent of those participating in publicity indicated mean scores of either 1 or 2 on the perceived constraint side of the scale. Therefore, this indicates that a minority of respondents do not feel perceived freedom when participating in administration and publicity.

C. Motivation in Preferred and Disliked Volunteer Activities

Introduction

The study examined the type of volunteer activities and leisure activities that were most enjoyed as well as the type of volunteer activities that were least enjoyed. It also examined the motivational elements of why trail volunteers most enjoyed or least enjoyed these activities.

The sections which follow describe the findings with respect to:

1. Type of activity and reasons for most enjoying and least enjoying activities:
   a. Most Enjoyed Volunteer Activity
   b. Least Enjoyed Volunteer Activity
   c. Most Enjoyed Leisure Activity

2. Motivational Scales
   a. Perceived Freedom and Constraint
   b. Intrinsic and Extrinsic Motivation
   c. Altruism and Self-Interest

Type of Activity and Enjoyment Reasons

Tables 22, 23, 26, 27, 30 and 31 show the responses to the open-ended questions which asked respondents what volunteer activities they enjoyed doing the most and the least as well as what leisure activity they enjoyed doing the most. [6] Tables

[6]There are two tables shown for each type of activity. The first table shows

24, 25, 28, 29, 32 and 33 show the responses to open-ended questions which asked respondents why they enjoyed or least enjoyed these activities. [7]

Most Enjoyed Volunteer Activity. In terms of total responses, Table 22 indicates that the general category of trail work (trail construction and maintenance) was the overwhelming favorite volunteer activity with a frequency of almost fifty percent (48.8 percent). Outings (17.1 percent) and administration (14.6 percent) ranked second and third but had considerably lower frequency scores. In terms of specific types of activities, Table 23 shows trail maintenance (27.2 percent) and trail construction (22.2 percent) as overwhelming favorites with planning trails (7.4 percent) a distant third.

Table 24 indicates that most volunteers enjoy their favorite volunteer activity because of their enjoyment of the outdoors, nature and outdoor activities. This reason made up 26.7 percent of the total responses. Of secondary importance were the following reasons: accomplishment, altruism, and exercise and health, each of which accounted for approximately 12 percent of the responses. Other notable reasons were: worthwhile cause and social contact, each accounting for 8.3 percent of the responses.

Because construction and maintenance was, for many, an overwhelming choice for the most enjoyed volunteer activity, it was decided to examine the reasons why it was a favorite. Table 25 indicates that most respondents (56.4 percent) clearly were interested in the outdoors and nature. Exercise/health (35.9 percent) and accomplishment were also of some importance (28.2 percent).

The three VTOs showed differences in terms of their preferences for volunteer activities. While trail work was the definite choice for the majority of GDTA (69.6 percent) and WTA volunteers (62.2 percent), it had one of the lowest frequency scores for the TNF (4.5 percent). As indicated earlier, the TNF tends to rely on hired crews to

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[6](cont'd) the more general category of activity (e.g. Administration) while the second table breaks the general categories into more specific types of activities (e.g. board meetings, fund raising, etc.).

[7]Many respondents provided more than one reason for enjoying their favorite volunteer and leisure activities. Therefore, up to two responses were analysed for each of these questions.

Table 22

General Category of Volunteer Activity Most Enjoyed

General Activity Category	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
1. Trail Work	16	69.6	1	4.5	23	62.2	40	48.8
2. Outings	-	--	9	40.9	5	13.5	14	17.1
3. Administration	2	8.7	7	31.8	3	8.1	12	14.6
4. Research	5	21.7	2	9.1	1	2.7	8	9.8
5. Publicity	-	--	1	4.5	4	10.8	5	6.1
6. Miscellaneous	-	--	2	9.1	1	2.7	3	3.7
No Response	-	--	4	missing	1	missing	5	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 40.64; d.f. = 10; $p < .05$

Table 23

Specific Category of Volunteer Activity Most Enjoyed

*Specific Activity Category	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Trail Maintenance (1)	4	17.4	-	--	18	48.6	22	27.2
Trail Construction (1)	12	52.2	1	4.8	5	13.5	18	22.2
Planning Trail (4)	5	21.7	-	--	1	2.7	6	7.4
Organ. Trail Rides (2)	-	--	4	19.0	-	--	4	4.9
Hiking (2)	-	--	-	--	4	10.8	4	4.9
Publicity (5)	-	--	1	4.8	2	5.4	3	3.7
Miscellaneous (6)	-	--	2	9.5	1	2.7	3	3.7
Organ. Events (2)	-	--	3	14.3	-	--	3	3.7
Board Meetings (3)	-	--	2	9.5	-	--	2	2.5
Membership (3)	1	4.3	-	--	1	2.7	2	2.5
Member of Exec (3)	-	--	-	--	2	5.4	2	2.5
Direct Policy (3)	1	4.3	1	4.8	-	--	2	2.5
Historical Res (4)	-	--	2	9.5	-	--	2	2.5
Trail Riding (2)	-	--	2	9.5	-	--	2	2.5
Newsletters (5)	-	--	-	--	2	5.4	2	2.5
Secretarial (3)	-	--	1	4.8	-	--	1	1.2
Financial (3)	-	--	1	4.8	-	--	1	1.2
Fund Raising (3)	-	--	1	4.8	-	--	1	1.2
Organ. Hikes (2)	-	--	-	--	1	2.7	1	1.2
No Response	-	--	5	missing	1	missing	6	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

*Numbers following activities correspond to the general categories of volunteer activities listed in Table 22.

Table 24

Reasons for Enjoying Favorite Volunteer Activity
(Multiple Responses)

Reasons	GDTA			TNF			WTA			Total		
	C[1]	Resp.[2] %	Cases[3] %	C	Resp. %	Cases %	C	Resp. %	Cases %	C	Resp. %	Cases %
Outdoors/ Nature	9	27.3	40.9	4	14.8	20.0	19	31.7	51.4	32	26.7	40.5
Accomplish.	6	18.2	27.3	3	11.1	15.0	6	10.0	16.2	15	12.5	19.0
Altruism	3	9.1	13.6	5	18.5	25.0	6	10.0	16.2	14	11.7	17.7
Exercise/ Health	5	15.2	22.7	-	--	--	9	15.0	24.3	14	11.7	17.7
Worthwhile Cause	4	12.1	18.2	3	11.1	15.0	3	5.0	8.1	10	8.3	12.7
Social Contact	1	3.0	4.5	2	7.4	10.0	7	11.7	18.9	10	8.3	12.7
Creativity/ Learning	1	3.0	4.5	4	14.8	20.0	2	3.3	5.4	7	5.8	8.9
Offer Expertise	2	6.1	9.1	3	11.1	15.0	-	--	--	5	4.2	6.3
Challange/ Excitement	1	3.0	4.5	1	3.7	5.0	1	1.7	2.7	3	2.5	3.8
Easy/ Convenient	1	3.0	4.5	-	--	--	2	3.3	5.4	3	2.5	3.8
Escape	-	--	--	-	--	--	2	3.3	5.4	2	1.7	2.5
Social Power	-	--	--	1	3.7	5.0	1	1.7	2.7	2	1.7	2.5
Fun/Enjoy	-	--	--	1	3.7	5.0	1	1.7	2.7	2	1.7	2.5
Relaxation	-	--	--	-	--	--	1	1.7	2.7	1	0.8	1.3
Total	33	100	150	27	100	135	60	100	162.2	120	100	151.9

Chi-square = 30.48; d.f. = 26; p> .05; not significant

1 Count - Number of Responses
2 Percent of Responses
3 Percent of Cases

Table 25

Why Volunteers Enjoy Trail Work as Favorite Volunteer Activity
(Multiple Responses)

Reasons	GDTA			TNF			WTA			Total		
	C[1]	Resp.[2] %	Cases[3] %	C	Resp. %	Cases %	C	Resp. %	Cases %	C	Resp. %	Cases %
Outdoors/ Nature	6	26.1	40.0	-	--	--	16	40.0	69.6	22	33.8	56.4
Exercise/ Health	5	21.7	33.3	-	--	--	9	22.5	39.1	14	21.5	35.9
Accomplish.	6	26.1	40.0	-	--	--	5	12.5	21.7	11	16.9	28.2
Worthwhile	3	13.0	20.0	1	50.0	100.0	2	5.0	8.7	6	9.2	15.4
Social Con.	1	4.3	6.7	1	50.0	100.0	3	7.5	13.0	5	7.7	12.8
Altruism	2	8.7	13.3	-	--	--	3	7.5	13.0	5	7.7	12.8
Fun/Enjoy.	-	--	--	-	--	--	1	2.5	4.3	1	1.5	2.6
Other	-	--	--	-	--	--	1	2.5	4.3	1	1.5	2.6
Total	23	100.0	153.3	2	100.0	200.0	40	100.0	173.9	65	100.0	166.7

1 Count - Number of Responses
2 Percent of Responses
3 Percent of Cases

Table 26

General Category of Volunteer Activity Least Enjoyed

General Activity Category	GDTA			TNF			WTA			Total		
	N	Rel%	Adj%	N	Rel%	Adj%	N	Rel%	Adj%	N	Rel%	Adj%
1.Admin.	6	26.1	30.0	12	46.2	57.1	13	34.2	41.9	31	35.6	43.1
2. None Noted	5	21.7	25.0	3	11.5	14.3	10	26.3	32.3	18	20.2	25.0
3. Trail Work	3	13.0	15.0	-	--	--	4	10.5	12.9	7	8.0	9.7
4. Outings	-	--	--	4	15.4	19.0	2	5.3	6.5	6	6.9	8.3
5. Miscell.	4	17.4	20.0	2	7.7	9.5	-	--	--	6	6.9	8.3
6. Research	2	8.7	10.0	-	--	--	-	--	--	2	2.3	2.8
7. Publicity	-	--	--	-	--	--	2	5.3	6.5	2	2.3	2.8
No Res.	3	13.0	Missing	5	19.2	Missing	7	18.4	Missing	15	17.2	Missing
Total	23	100.0	100.0	26	100.0	100.0	38	100.0	100.0	87	100.0	100.0

Chi-square = 24.75; d.f. = 12; p< .05

do its trail work and this is reflected in these figures. The TNF volunteers' preferences for volunteer activities lie in organizing, putting on, and participating in outings and events (40.9 percent). In addition, a number of TNF volunteers enjoy administrative tasks (31.8 percent).

Least Enjoyed Volunteer Activity. Tables 26 and 27 provide frequencies for the general and specific categories of volunteer activities least enjoyed. In total, over one third (35.6 percent) of the respondents least enjoyed the general category of administration (Table 26). This choice was consistent across all three VTOs. In terms of the specific breakdown of administration (Table 27), trail volunteers least liked board meetings (20.0 percent), followed by secretarial duties (7.1 percent) and fundraising (5.7 percent). One fifth (20.7 percent) of the respondents indicated that they did not have an activity that they least enjoyed (Table 26). In addition, 17.2 percent of the respondents did not answer this question, which likely indicates that they did not have a least enjoyed activity. An explanation given by a limited number of respondents was that they did not engage in activities they did not enjoy. In total, only 26.4 percent of the respondents indicated any of the remaining general categories as their least enjoyed volunteer activity.

Table 26 also indicates that there was a significant difference between the VTOs with respect to the least enjoyed volunteer activity. It was apparent that a greater percentage of TNF volunteers (46.2 percent) chose administration as compared to their counterparts in the GDTA (26.1 percent) and WTA (34.2 percent). In addition, fewer TNF volunteers indicated that they did not have a volunteer activity they did not enjoy when compared to the responses of the volunteers in the other two groups.

When asked why they least enjoyed the volunteer activity, most respondents (42.5 percent) did not reply (Table 28). Those that did said that their least enjoyed activity was a waste of time (16.0 percent), that they lacked the skill to do the activity (14.0 percent), or they found the activity tedious or boring (14.0 percent). As noted

Table 27

Specific Category of Volunteer Activity Least Enjoyed

*Specific Activity Category	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Don't Have One (2)	5	25.0	3	15.8	10	32.3	18	25.7
Board Meetings (1)	2	10.0	2	10.5	10	32.3	14	20.0
Miscellaneous (5)	4	20.0	2	10.5	-	--	6	8.6
Secretarial (1)	3	15.0	1	5.3	1	3.2	5	7.1
Fundraising (1)	-	--	4	21.1	-	--	4	5.7
Heavy Labour (3)	2	10.0	-	--	2	6.5	4	5.7
Organ. Trail Rides (4)	-	--	3	15.8	-	--	3	4.3
Financial (1)	-	--	2	10.5	-	--	2	2.9
Member Exec. (1)	-	--	-	--	2	6.5	2	2.9
Organ. Trail Hikes (4)	-	--	-	--	2	6.5	2	2.9
Trail Maintenance (3)	-	--	-	--	2	6.5	2	2.9
Membership (1)	-	--	1	5.3	-	--	1	1.4
Direct Policy (1)	1	5.0	-	--	-	--	1	1.4
Historic Res. (6)	1	5.0	-	--	-	--	1	1.4
Planning Trail (6)	1	5.0	-	--	-	--	1	1.4
Publicity (7)	-	--	-	--	1	3.2	1	1.4
Newsletters (7)	-	--	-	--	1	3.2	1	1.4
Trail Construction (3)	1	5.0	-	--	-	--	1	1.4
Organ. Events (4)	-	--	1	5.3	-	--	1	1.4
No Response	3	missing	7	missing	7	missing	17	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

*Numbers following activities correspond to the general categories of volunteer activities listed in Table 26.

Table 28

Reasons for Least Enjoying Volunteer Activity

Reason	GDTA			TNF			WTA			Total		
	N	Rel%	Adj%	N	Rel%	Adj%	N	Rel%	Adj%	N	Rel%	Adj%
Waste of Time	1	4.3	7.1	3	11.5	18.8	4	10.5	20.0	8	9.2	16.0
Lack of Skill	1	4.3	7.1	3	11.5	18.8	3	7.9	15.0	7	8.0	14.0
Tedious /Boring	3	13.0	21.4	2	7.7	12.5	2	5.3	10.0	7	8.0	14.0
Lack of Support	2	8.7	14.3	3	11.5	18.8	-	--	--	5	5.7	10.0
Lack of Time	2	8.7	14.3	-	--	--	3	7.9	15.0	5	5.7	10.0
Miscellaneous	2	8.7	14.3	2	7.7	12.5	1	2.6	5.0	5	5.7	10.0
Lacks Exercise	1	4.3	7.1	-	--	--	2	5.3	10.0	3	3.4	6.0
Dislike Job Itself	1	4.3	7.1	1	3.8	6.1	1	2.6	5.0	3	3.4	6.0
Too Physical	1	4.3	7.1	-	--	--	2	5.3	10.0	3	3.4	6.0
Mismanagement	-	--	--	2	7.7	12.5	-	--	--	2	2.3	4.0
Others Make Decisions	-	--	--	-	--	--	2	5.3	10.0	2	2.3	4.0
No Response	9	39.1	Missing	10	38.5	Missing	18	47.4	Missing	37	42.5	Miss.
Total	23	100	100	26	100	100	38	100	100	87	100	100

Chi-square = 24.40; d.f. = 20; p> .05; not significant

Table 29

Why Volunteers Least Enjoy Administration

Reasons	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
Waste of Time	-	--	3	30.0	4	33.3	7	25.0
Lack of Time	2	33.3	-	--	2	16.7	4	14.3
Lack of Skill	-	--	2	20.0	2	16.7	4	14.3
Tedious or Boring	2	33.3	1	10.0	1	8.3	4	14.3
Lack of Support	1	16.7	2	20.0	-	--	3	10.7
Mismanagement	-	--	2	20.0	-	--	2	7.1
Others Make Decisions	-	--	-	--	2	16.7	2	7.1
Miscellaneous	1	16.7	-	--	-	--	1	3.6
Lacks Exercise	-	--	-	--	1	8.3	1	3.6
No Response	-	--	2	missing	1	missing	3	missing
Total	6	100.0	12	100.0	13	100.0	31	100.0

above, most volunteers indicated that administration was their least enjoyed volunteer activity. Similar reasons emerged when the reasons for not enjoying administration were isolated (Table 29). The main reason was that it was considered a waste of time (25.0 percent) followed by lack of time (14.3 percent), lack of skill (14.3 percent) and tedious or boring (14.3 percent).

Most Enjoyed Leisure Activity. Tables 30 and 31 indicate, respectively, the general and specific categories of leisure activities most enjoyed by respondents [1] Table 30 shows that 43 percent of trail volunteers considered outdoor recreation to be their most favorite leisure time activity. This figure was considerably higher than the second and third ranked activities of crafts/hobbies (18.6 percent) and sports (17.4 percent). It is of some interest to note that in total, hiking was the top ranked specific leisure activity (Table 31).

Table 32 shows the reasons why volunteers enjoy their favorite leisure activity. The top four reasons were outdoors/nature (26.2 percent), creativity/learning (23.8 percent), relaxation (22.6 percent), and exercise/health (21.4 percent). Since outdoor recreation ranked highest of all favorite leisure activities, it was decided to look at the reasons why volunteers enjoyed it. Table 33 indicates that in total, outdoors/nature (52.8 percent) was the most important reason, followed by exercise/health (38.9 percent) and relaxation (22.9 percent).

Motivational Scales

Perceived Constraint and Freedom. Table 34 lists the three categories of activities in rank order by their mean scores for level of perceived constraint or freedom (I feel compelled=1; I want to do it=5). The results show that volunteers feel a

[1]The nature of the open-ended question indicated that respondents could put down either a general or specific category. General categories could be determined from the specific categories but not the other way around. This explains why there are less responses in the specific categories in Table 31 as compared to the general categories in Table 30.

Table 30

General Category of Leisure Activity Most Enjoyed

Activity	GDTA		TNF		WTA		Total	
	N	%	N	%	N	%	N	%
1. Outdoor Recreation	10	43.5	8	30.8	19	51.4	37	43.0
2. Crafts or Hobbies	3	13.0	5	19.2	8	21.6	16	18.6
3. Sports	5	21.7	7	26.9	3	8.1	15	17.4
4. Volunteer Work	1	4.3	2	7.7	2	5.4	5	5.8
5. Travel	-	--	2	7.7	3	8.1	5	5.8
6. Music	2	8.7	-	--	2	5.4	4	4.7
7. Social Gatherings	1	4.3	1	3.8	-	--	2	2.3
8. Other	1	4.3	1	3.8	-	--	2	2.3
No Response	-	--	-	--	1	missing	1	missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

Chi-square = 11.80; d.f. = 14; p> .05; not significant

Table 31

Specific Leisure Activity Most Enjoyed

*Specific Activity Category	GDTA N	GDTA %	TNF N	TNF %	WTA N	WTA %	Total N	Total %
Hiking (1)	4	25.0	2	10.5	11	42.3	17	27.9
Reading (2)	-	--	4	21.1	3	11.5	7	11.5
Riding (1)	-	--	4	21.1	-	--	4	6.6
Travel (5)	-	--	2	10.5	2	7.7	4	6.6
Running (3)	2	12.5	-	--	1	3.8	3	4.9
Volunteering (4)	1	6.3	1	5.3	1	3.8	3	4.9
Cross Country Skiing (1)	1	6.3	-	--	1	3.8	2	3.3
Nature Study (2)	-	--	-	--	2	7.7	2	3.3
Golf (3)	-	--	1	5.3	1	3.8	2	3.3
Carpentry (2)	2	12.5	-	--	-	--	2	3.3
Musical Instrument (6)	-	--	-	--	2	7.7	2	3.3
Social Gathering (7)	1	6.3	1	5.3	-	--	2	3.3
Paddling (1)	1	6.3	-	--	-	--	1	1.6
Climbing (1)	1	6.3	-	--	-	--	1	1.6
Scuba Diving (3)	-	--	1	5.3	-	--	1	1.6
Sewing (2)	1	6.3	-	--	-	--	1	1.6
Crafts (2)	-	--	-	--	1	3.8	1	1.6
Gardening (2)	-	--	-	--	1	3.8	1	1.6
Stamps (2)	-	--	1	5.3	-	--	1	1.6
Folk Singing (6)	1	6.3	-	--	-	--	1	1.6
Trail Org. Work (4)	-	--	1	5.3	-	--	1	1.6
Municipal Politics (8)	-	--	1	5.3	-	--	1	1.6
Star Studies(8)	1	6.3	-	--	-	--	1	1.6
No Response	7	Missing	7	Missing	12	Missing	26	Missing
Total	23	100.0	26	100.0	38	100.0	87	100.0

* Numbers following activities correspond to the general categories of leisure activities listed in Table 30.

Table 32

Reasons for Enjoying Favorite Leisure Activity
(Multiple Responses)

Reasons	GDTA			TNF			WTA			Total		
	C[1]	Resp.[2] %	Cases[3] %	C	Resp. %	Cases %	C	Resp. %	Cases %	C	Resp. %	Cases %
Outdoors/ Nature	5	12.2	21.7	4	12.9	16.7	13	21.7	35.1	22	16.7	26.2
Creativity/ Learn.	6	14.6	26.1	6	19.4	25.0	8	13.3	21.6	20	15.2	23.8
Relaxation	5	12.2	21.7	9	29.0	37.5	5	8.3	13.5	19	14.4	22.6
Exercise/ Health	9	22.0	39.1	1	3.2	4.2	8	13.3	21.6	18	13.6	21.4
Accomplish.	3	7.3	13.0	2	6.5	8.3	6	10.0	16.2	11	8.3	13.1
Social Contact	3	7.3	13.0	2	6.5	8.3	5	8.3	13.5	10	7.6	11.9
Escape	2	4.9	8.7	2	6.5	8.3	5	8.3	13.5	9	6.8	10.7
Hobby	1	2.4	4.3	2	6.5	8.3	4	6.7	10.8	7	5.3	8.3
Fun/ Enjoyment	2	4.9	8.7	-	--	--	4	6.7	10.8	6	4.5	7.1
Chal./ Excitement	3	7.3	13.0	1	3.2	4.2	1	1.7	2.7	5	3.8	6.0
Worthwhile Cause	1	2.4	4.3	1	3.2	4.2	-	--	--	2	1.5	2.4
Emotional/ Spiritual	1	2.4	4.3	1	3.2	4.2	-	--	--	2	1.5	2.4
Altruism	-	--	--	-	--	--	1	1.7	2.7	1	0.8	1.2
Total	41	100	178.3	31	100	129.2	60	100	162.2	132	100	157.1

Chi-square = 23.06; d.f. = 24; p> .05; not significant

1 Count - Number of Responses
2 Percent of Responses
3 Percent of Cases

Table 33

Why Volunteers Enjoy Outdoor Recreation as Favorite Leisure Activity

Reasons	GDTA			TNF			WTA			Total		
	C[1]	Resp.[2] %	Cases[3] %	C	Resp. %	Cases %	C	Resp. %	Cases %	C	Resp. %	Cases %
Outdoors/ Nature	4	21.1	40.0	3	27.3	42.9	12	36.4	63.2	19	30.2	52.8
Exercise/ Health	7	36.8	70.0	-	--	--	7	21.2	36.8	14	22.2	38.9
Relaxation	1	5.3	10.0	5	45.5	71.4	2	6.1	10.5	8	12.7	22.2
Escape	1	5.3	10.0	1	9.1	14.3	3	9.1	15.8	5	7.9	13.9
Creativity/ Learn.	2	10.5	20.0	-	--	--	2	6.1	10.5	4	6.3	11.1
Social Contact	-	--	--	-	--	--	3	9.1	15.8	3	4.8	8.3
Chal./ Excitement	3	15.8	30.0	-	--	--	-	--	--	3	4.8	8.3
Fun/ Enjoyment	1	5.3	10.0	-	--	--	2	6.1	10.5	3	4.8	8.3
Accomplish.	-	--	--	1	9.1	14.3	1	3.0	5.3	2	3.2	5.6
Emotional/ Spiritual	-	--	--	1	9.1	14.3	-	--	--	1	1.6	2.8
Hobby	-	--	--	-	--	--	1	3.0	5.3	1	1.6	2.8
Total	19	100	190.0	11	100	157.1	33	100	173.7	63	100	175.0

1 Count - Number of Responses
2 Percent of Responses
3 Percent of Cases

Table 34

Mean Scores and Standard Deviations of Perceived Constraint/Freedom in Three Activities

Activity Category	GDTA M	GDTA S.D.	TNF M	TNF S.D.	WTA M	WTA S.D.	Total M	Total S.D.
Most Enjoyed Leisure Activity	4.8	0.5	4.8	0.1	4.9	0.3	4.8	0.4
Most Enjoyed Volunteer Activity	4.2	0.9	4.2	0.9	4.3	0.8	4.2	0.9
Least Enjoyed Volunteer Activity	1.9	1.2	2.2	1.3	2.0	1.0	2.0	1.2

Table 35

Mean Scores and Standard Deviations of Extrinsic/Intrinsic Motivation in Three Activities

Activity Category	GDTA M	GDTA S.D.	TNF M	TNF S.D.	WTA M	WTA S.D.	Total M	Total S.D.
Most Enjoyed Leisure Activity	4.6	0.8	4.9	0.3	4.9	0.3	4.8	0.5
Most Enjoyed Volunteer Activity	4.3	0.7	4.2	0.8	4.4	0.6	4.3	0.7
Least Enjoyed Volunteer Activity	3.2	1.0	3.7	1.1	3.6	1.2	3.5	1.1

great deal of perceived freedom when they participate in their most enjoyed leisure activity, as indicated by the total mean score of 4.8. In terms of the most enjoyed volunteer activity, the total mean score of 4.2 also suggested a tendency towards perceived freedom. In direct contrast, the results on the least enjoyed volunteer activity showed a tendency toward perceived constraint as evidenced by the mean score of 2.0. A oneway analysis of variance test conducted on the data in Table 34 revealed no significant differences between the VTOs with respect to perceived constraint and freedom.

Extrinsic and Intrinsic Motivation. Table 35 lists the three categories of activities in rank order by their mean scores for level of extrinsic or intrinsic motivation (Appreciation or recognition or incentive=1; A feeling of satisfaction from doing the activity itself=5) The findings in Table 35 show participation in the most enjoyed leisure activity is highly intrinsically motivating, as indicated by the mean score of 4.8. This tendency is also evident for the most enjoyed volunteer activity although to a slightly lesser extent (M=4.3). These results are very similar to those found in the above section concerning the trend towards perceived freedom. With respect to the least enjoyed volunteer activity, the mean score of 3.5 is considerably lower than the scores for the other two activities. It signifies a mixture of both intrinsic and extrinsic motivations with a gravitation towards the former motive. A oneway analysis of variance test conducted on the data in Table 35 revealed no significant differences between the VTOs with respect to extrinsic and intrinsic motivation.

Altruism and Self-Interest Motives. Table 36 lists the most enjoyed and least enjoyed volunteer activities by their mean scores for level of altruism and self-interest (To help others=1; For my own interests=5). The question on which these results are based referred only to the two volunteer activities since altruism and self-interest were not considered applicable to the favorite leisure activity category. The mean score of 2.6 shows that the respondents considered most enjoyed volunteer activities to be

Table 36

Mean Scores and Standard Deviations of Altruism/Self-Interest in Two Volunteer Activities

Activity Category	GDTA M	GDTA S.D.	TNF M	TNF S.D.	WTA M	WTA S.D.	Total M	Total S.D.
Most Enjoyed Volunteer Activity	2.4	0.8	2.9	1.3	2.4	1.1	2.6	1.1
Least Enjoyed Volunteer Activity	1.8	1.1	1.9	1.3	1.8	0.7	1.8	1.0

Table 37
Correlation Between Mean Scores for Perceived Constraint/Freedom and Extrinsic/Intrinsic Motivation

Variable Pairs	Pearson r	Sig.*
Most Enjoyed Leisure Activity	.57	p<.001
Most Enjoyed Volunteer Activity	.49	p<.001
Least Enjoyed Volunteer Activity	.50	p<.001
Mean Coefficient	.52	

*Two tailed test

influenced by both altruistic and self-interest motives, although there was more of a leaning towards altruism. The tendency towards altruism is far more pronounced in the results for least enjoyed volunteer activity which had a total mean score of 1.8. A oneway analysis of variance test conducted on the data in Table 36 revealed no significant differences between the VTOs with respect to altruism and self-interest.

Correlation Between Variables. In order to see if there was any relationship between the three types of motives, Pearson product-moment correlation coefficients were calculated between the mean scores of perceived constraint/freedom, extrinsic/intrinsic motivation and altruism/self-interest. The results in Tables 37, 38, and 39 indicate that the only significant relationship found was between perceived constraint/freedom and extrinsic/intrinsic motivation. In this regard, the results showed a positive and moderate relationship between the two variables with correlation coefficients ranging from .49 to .59 and with a mean coefficient of .52.

D. Reasons for Volunteer Participation

Reasons for Starting

Results. Table 40 indicates the reasons why respondents first started volunteering for their VTO. Respondents were asked to check their top two reasons from a list of nine reasons. For the total number of volunteers, outdoors/nature had by far the highest percentage of the multiple responses (30.3 percent). This was followed by nature/history concern (16.9 percent), asked by a friend (11.3 percent), sense of involvement (10.6 percent), and sense of obligation (9.2 percent). These reasons combined represented 78.3 percent of the multiple responses.

Some differences were also evident between trail organizations. Whereas the reason outdoors/nature was chosen by most volunteers in the GDTA and the WTA, nature/history concern was chosen by most TNF volunteers. Also, in contrast to the

Table 38
Correlation Between Mean Scores for Perceived Constraint/Freedom and Altruism/Self-Interest

Variable Pairs	Pearson r	Sig.*
Most Enjoyed Volunteer Activity	-.04	n.s.
Least Enjoyed Volunteer Activity	.15	n.s.

*Two tailed test

Table 39
Correlation Between Mean Scores for Extrinsic/Intrinsic Motivation and Altruism/Self-Interest

Variable Pairs	Pearson r	Sig.*
Most Enjoyed Volunteer Activity	-.09	n.s.
Least Enjoyed Volunteer Activity	.25	n.s.

*Two tailed test

Table 40

Reasons for First Starting to Volunteer for VTO
(Multiple Responses)

Reasons	GDTA			TNF			WTA			Total		
	C[1]	Resp.[2] %	Cases[3] %	C	Resp. %	Cases %	C	Resp. %	Cases %	C	Resp. %	Cases %
Outdoors/ Nature	11	30.6	47.8	6	15.4	23.1	26	38.8	68.4	43	30.3	49.4
Nat/Histor Concern	5	13.9	21.7	14	35.9	53.8	5	7.5	13.2	24	16.9	27.6
Asked by Friend	6	16.7	26.1	6	15.4	23.1	4	6.0	10.5	16	11.3	18.4
Sense of Involvement	4	11.1	17.4	3	7.7	11.5	8	11.9	21.1	15	10.6	17.2
Sense of Obligation	3	8.3	13.0	-	--	--	10	14.9	26.3	13	9.2	14.9
Hiking Act.	-	--	-	-	--	--	9	13.4	23.7	9	6.3	10.3
Social Contact	-	--	--	4	10.3	15.4	3	4.5	7.9	7	4.9	8.0
Prev. Exper.	3	8.3	13.0	1	2.6	3.8	1	1.5	2.6	5	3.5	5.7
Appoint. Rep.	-	--	--	3	7.7	11.5	-	--	--	3	2.1	3.4
Spouse Influenced	1	2.8	4.3	-	--	--	1	1.5	2.6	2	1.4	2.3
Worthwhile Project	1	2.8	4.3	1	2.6	3.8	-	--	--	2	1.4	2.3
Other	2	5.6	8.6	1	2.6	3.8	-	--	--	3	2.1	3.4
Total	36	100	156.5	39	100	150.0	67	100	176.3	142	100	162.8

Chi-square = 55.02; d.f. = 22; p< .05

1 Count - Number of Responses
2 Percent of Responses
3 Percent of Cases

other two VTOs, a number of WTA volunteers chose sense of obligation and hiking activities as important reasons.

Reasons for Continued Volunteer Participation

Introduction. The study also examined a number of reasons for continued participation by trail volunteers in VTOs. Apart from the Curnan *et al.* (1979) study, no other research could be found which examined specific reasons for continued adherence to volunteer activities. Finding out why people continue to participate in volunteer programs is important in understanding volunteer motivation and adherence to programs. It can also provide useful information that can be used by VTO administrators to formulate policies to enhance volunteer retention. Also of some interest is whether there is a difference between reasons for starting to volunteer and reasons for continued participation. A number of studies in the fitness and physical activity field have looked at this question. Wankel (in press) cites a number of authors (Heinzelmann, 1973; Oldridge, 1982; Perrin, 1979; and Wankel, 1985) who have found that reasons for starting a fitness program may be different from those for continued adherence to the program. For example, in most studies the results generally showed that although people started programs for essentially instrumental reasons such as to keep healthy, they continued with the program because they obtained enjoyment from their participation.

Unfactored Reasons. Table 41 indicates the mean scores and their rank order for thirty eight reasons for continued volunteer participation. The mean scores are based on the following weights assigned to the value statements:

1=Very Untrue for Me
2=Untrue for Me
3=Neutral
4=True for Me
5=Very True for Me

Table 42 shows the total multiple response results for the two open-ended reasons for continued volunteer participation.

Table 41

Mean Scores for Reasons for Continued Volunteer Participation in VTO

Reasons*		GDTA		TNF		WTA		Total	
		Rank	M.S	Rank	M.S.	Rank	M.S.	Rank	M.S
Project Worthwhile	(2)	1	4.39	4	4.15	6	4.25	1	4.26
Preserve-Fut. Gen.	(2)	2	4.35	2	4.35	9	4.08	2	4.23
Outdoors/Nature	(1)	4	4.18	12	3.42	1	4.64	3	4.14
Preserve-Posterity	(2)	7	4.00	1	4.44	11	4.00	4	4.13
Nat./Hist. Concern	(2)	5	4.09	3	4.31	10	4.03	4	4.13
Recreation Related		3	4.22	6	3.81	7	4.17	6	4.07
Aesthetics/Solitude	(1)	8	3.96	10	3.50	3	4.44	7	4.02
Relaxation	(1)	6	4.04	23	3.04	2	4.47	8	3.92
Provide Rec.for Others	(2)	9	3.87	7	3.80	12	3.83	9	3.83
Escape - Urban	(1)	12	3.78	19	3.23	7	4.17	10	3.78
Physical Exertion	(1)	9	3.87	30	2.77	4	4.31	11	3.72
Comradeship	(4)	13	3.74	5	3.85	14	3.75	11	3.72
Keep Healthy	(1)	11	3.86	30	2.77	4	4.31	13	3.71
Meet New people	(4)	15	3.48	8	3.65	15	3.61	14	3.65
Different from Work	(1)	20	3.14	17	3.28	13	3.77	15	3.45
Adventure	(3)	17	3.35	11	3.45	16	3.56	16	3.43
Self-Fulfillment	(3)	16	3.43	15	3.38	20	3.47	16	3.43
Learn New Things		21	3.13	12	3.42	18	3.50	18	3.38
Use Skills	(3)	14	3.52	9	3.58	28	3.06	19	3.34
Public Duty	(5,2)	21	3.13	12	3.42	24	3.19	20	3.25
Feel Needed	(2)	18	3.30	16	3.32	25	3.14	21	3.24
Friends in Org.	(4)	19	3.26	21	3.12	22	3.25	22	3.21
Belong to Group	(4,5)	25	2.96	24	2.96	23	3.22	23	3.07
Confidence Outdoors	(1,6)	28	2.74	32	2.72	18	3.50	24	3.06
Feel Appreciated	(5)	23	3.04	27	2.88	25	3.14	25	3.03
Solve Problems	(3)	26	2.83	18	3.27	29	2.94	26	3.01
Backcountry Exper.	(1,6)	31	2.48	28	2.79	21	3.44	27	2.99
Learn Capabilities	(3)	23	3.04	22	3.08	31	2.86	28	2.98
Primitive Lifestyle	(6)	29	2.73	26	2.92	25	3.14	29	2.96
Feel Obligation		30	2.59	34	2.46	17	3.54	30	2.95
Equiv. to Job in Area	(6)	35	2.19	24	2.96	32	2.77	31	2.68
Family Togetherness		34	2.33	33	2.62	30	2.91	32	2.67
Obtain Respect	(5)	27	2.77	27	2.88	33	2.44	32	2.67
Lead Others		37	2.04	20	3.16	34	2.31	34	2.49
Status to Belong	(5)	32	2.43	36	2.42	35	2.17	35	2.32
Similar to Work	(6)	32	2.43	34	2.44	36	2.03	36	2.27
Career Contacts	(6)	36	2.14	37	2.36	38	1.94	37	2.11
Escape Family		38	1.86	38	2.08	37	1.97	38	1.97

*Numbers in parenthesis beside reasons indicate the factors which correspond to each reason. Those without numbers did not load sufficiently high enough on any factor and therefore remained unclassified. Also, some reasons have two numbers in parenthesis which indicates a loading over .440 on two factors.

Table 42

Open Ended Reasons for Continued Volunteer Participation in VTO
(Multiple Responses)

Reasons	Total C[1]	Resp[2] %	Cases[3] %
Appreciation or Concern For Nature/History	6	21.4	30.0
Altruism (Doing Something for Others)	4	14.3	20.0
Preservation as a Worthwhile Cause	3	10.7	15.0
Feel a Sense of Obligation	3	10.7	15.0
Feel Needed by the Organization	3	10.7	15.0
Enjoying Outdoors and Nature	1	3.6	5.0
Primitive or Pioneer Experience	1	3.6	5.0
Learn More About an Area	1	3.6	5.0
Escape from Civilization	1	3.6	5.0
Similar to Work	1	3.6	5.0
Accomplishing Something as a Group	1	3.6	5.0
Accomplishment In Seeing Results	1	3.6	5.0
Explore or Visit New Area	1	3.6	5.0
Sense of Ownership of Trail	1	3.6	5.0
No Response	67	Missing	Missing
Total	95	100.0	140.0

1 Count - Number of Responses
2 Percent of Responses
3 Percent of Cases

As can be seen, Table 41 presents a great number and variety of reasons for participation. It was felt that many of these reasons were related to one another and therefore could be reduced to a smaller number of factors. This would allow for a greater ease of interpretation of the results of this table.

Factor Analysis of Reasons. The thirty eight reasons noted above were subjected to the statistical technique of factor analysis. First, a principle component analysis using varimax rotation was run on the data. Ten factors with eigenvalues over 1.00 were obtained from this run. Of these ten factors, a few factors could not be readily identified or interpreted. It was therefore decided to run a series of factor analysis tests specifying from four to ten factors. Of these, the factor analysis test specifying six factors was considered the most suitable and interpretable with 56.2 percent of the total variance attributable to these six factors.[9]

Table 43 shows the results of the factor analysis of the six factors. Thirty three of the reasons loaded .440 (the preset criterion) or higher on the six factors. Five reasons did not load over .440 on any of the six factors and were therefore placed in an unclassified category. Table 44 in Appendix D shows the loadings for all of the 38 items on each of the six factors.

Interpretation of Six Factors. Based on an analysis of the six factors and their relationship to past literature, it is believed that these factors describe six motivational dimensions of trail voluntarism.

The outdoor recreation factor describes motives associated with the appeal of the outdoors and natural environment; physical exercise and fitness; health and relaxation; aesthetic appreciation and solitude of nature; escape from urban civilization and work environment; and a sense of competency and security in the outdoors. The use of the concept of outdoor recreation to describe these reasons is supported by the literature on the subject (Bolduc, 1973; Curnan *et al.*, 1979; Driver, 1972; Hendee

[9]See Appendix C for further information on the appropriateness of the factor analysis model.

Table 43

Factor Analysis of Reasons for Continued Volunteer Participation[1]

Factor and Itemized Reasons	Factor Loading
Factor 1 - Outdoor Recreation (21.8% of total variance)	
To be in the outdoors and have contact with nature	.832
For the good feelings brought about by physical exertion	.823
To help keep me in shape and to feel healthy	.812
To relax physically or mentally	.735
To appreciate the aesthetic appeal and solitude of the natural environment	.735
To get away from urban civilization for awhile	.733
** To feel confident and self sufficient in the outdoors	.611
To do things that are different from my work or occupation	.575
** To obtain a backcountry experience with relative security	.538
Factor 2 - Preservation Cause/Altruism (12.4% of total variance)	
To create or preserve something that will be used by future generations	.802
To create or preserve something that will be around when I'm gone	.717
To express my concern for natural or historical resources	.693
To work on a project I believe is worthwhile	.579
To provide outdoor recreational opportunities for others	.574
Because I feel I am needed in this organization	.493
* To fulfill a sense of public duty	.441
Factor 3 - Competency/Self Fulfillment (6.9% of total variance)	
To learn what I am capable of achieving	.672
For a sense of self-fulfillment and personal growth	.643
To solve problems and make decisions	.594
To develop and use my skills and talents	.553
Because of the sense of adventure involved in the activities or tasks	.490
Factor 4 - Social Affiliation (5.4% of total Variance)	
To meet new people	.740
Because I have friends involved in the organization	.674
For the sense of comradeship amongst companions	.626
** To obtain a sense of belonging to a group or being part of a team	.584
* To make contacts or obtain training leading to a job or career	.453

Table 43

(Continued)

Factor and Itemized Reasons	Factor Loading
Factor 5 - Service Recognition and Appreciation (5.1% of total variance)	
Because I feel appreciated by this organization	.793
Because it brings me a certain status to belong to this organization	.642
* To obtain a sense of belonging to a group or being part of a team	.484
** To fulfill a sense of public duty	.475
To obtain respect from people I care about	.458
Factor 6 - Relationship to Work (4.6% of total variance)	
To experience a primitive lifestyle or method of work	.574
To do things that are similar to my occupation	.568
Because volunteering is the next best thing to having a job in this area	.560
* To feel confident and self-sufficient in the outdoors	.513
* To obtain a backcountry experience with relative security	.503
** To make contacts or obtain training leading to a job or career	.496
Unclassified Reasons[2]	
To be involved in leading or managing others (Factor 2 .426)	
To help bring the family together more often (Factor 6 .382)	
Because I feel an obligation to the organization for what it has done for me (Factor 1 .428)	
Because the organization's activities are related to other recreational activities I enjoy (Factor 1 .426)	
To develop new interests or to learn new things (Factor 4 .421)	
To get away from the family for awhile (Factor 3 .557)[3]	

* Denotes "reason" loading on two factors. Reason loads lower on this factor.
** Also denotes "reason" loading on two factors. Reason loads higher on this factor.

[1] Only factors loading over .440 were included in the six factor categories.

[2] Factors loadings under .440. Bracketed figures indicate the factor on which the "reason" loads highest and the factor loading.

[3] See Appendix C for an explanation of why this variable has been placed in the unclassified category

et al., 1968; Iso-Ahola 1980; ORRRC, 1962; Rossman and Ulehla, 1977; Shafer and Mietz, 1972; and Stankey, 1972). The top three items (loading over .800) suggest that contact with the outdoor environment and the benefits of physical activity are particularly important motives in this factor.

The preservation cause and altruism factor describes the motives associated with a concern for the lasting preservation of the natural or historical resources of the trail and its surrounding environment. Included in this is a feeling of involvement with a worthwhile cause and a sense of leaving a legacy for the future. This factor also covers the altruistic aspect of providing outdoor recreation opportunities for other people as well as a sense of public duty or service in helping out the organization. This category of motivation relates to the altruism motive as described in the general literature on voluntarism. Although this motive is most often associated with helping others, it also covers such things as advancing a cause (Weinberg, 1975), expression of belief (Allen, 1980) and contributing to public service (Schindler-Rainman and Lippett, 1977). The Curnan *et al.* (1979) study on trail volunteers also indicates some support for this category. It found that the motives to fulfill civic duty and to have some say about natural resource management were reasons for volunteer participation that ranked moderately high.

The resource economics literature also has made reference to the values that people place on environmental preservation. A paper by Phillips and Adamowicz (1985), for example, describes *non-use values* which are used in cost-benefit analysis to assess resource allocation decisions. These non-use values include the importance that people place on preserving the environment for its own sake (existence values), for its potential use (option values), or for the use or appreciation of future genrations (bequest values).

The motives associated with the competency/self-fulfillment factor deal with the mastering or conquering of challenging situations and a resulting sense of achievement and self-fulfillment. Also included is a person's feelings of competency and

self-determination when solving problems and using his/her skills and abilities. The literature on motivation and voluntarism tends to support the existence of this grouping of motives. In particular, Deci's (1975) theories would suggest that this factor is almost synonomous with intrinsic motivation.

The social affiliation factor includes those needs associated with sociability and social interaction. It includes meeting new people and being sociable with friends in the organization. Also involved in this is a sense of affiliation, fellowship and comradeship with other members of the group and seeing oneself as being part of a team. A number of studies have indicated that social interaction is a motivation of voluntarism (Applied Research Centre, 1981; Goldhammer, 1964; Kelly, 1978; Palisi and Ibrahim, 1979; Weinburg, 1975). In fact, Aves (1969) has suggested that sociability is one of those key motivational components of voluntarism alongside altruism and self-interest.

The service recognition and appreciation factor describes people's needs for recognition, status or appreciation associated with their volunteer service in the organization. Included in this is the need to feel appreciated and recognized by the group as well as a pride and status associated with belonging to the organization. The research literature generally classifies appreciation and recognition motives under the general classification of self-interest motivation (Philips, 1982; Weinburg, 1975). Curnan *et al.* (1979) identified to fulfill civic duty as a motive of trail voluntarism but did not include appreciation, recognition or status as possible motives in their questions directed to trail volunteers.

The sixth factor consists of motives dealing with relationship to work. The highest loading items in this factor imply an association between trail volunteer activity and work. Work, in this regard, could be a person's occupation or it could consist of experiencing a new type of vocation or avocation. Some of the other items also suggest an interest in learning outdoor skills or primitive methods of work or obtaining self-sufficiency in the out-of-doors. Some of the reasons associated with this factor

are supported by the literature. Allen (1980:20) lists the acquisition of job related skills and experience to further one's career as examples of tangible personal rewards sought in volunteering. Weinberg (1975) also indicates that testing out career possibilities is a self-interest reason for participation. Apart from the motive to make contacts leading to career, this factor does not show up in the Curnan *et al*.(1979) study.

Importance of Reasons Based on Factors. Table 41 provides the mean scores for the reasons for continued volunteer participation. As can be seen in the table, each reason has been classified into each of the six factors. The bracketed number beside each reason corresponds to one of the six factors listed in Table 43. With a knowledge of how the reasons relate to the various factors, an analysis can be undertaken of the table to see how the factors relate to one another in terms of importance.

When the six factors were analyzed in terms of the mean scores for the thirty eight reasons, a number of trends emerged. It was evident that the factor considered most important to volunteers was the preservation/altruism factor which included four of the five top ranked reasons and had mean scores ranging from 3.83 to 4.26. This was followed by the outdoor recreation factor which predominated in the 3.45 to 4.02 range and had an overall range of 2.99 to 4.14. The third ranking factor, social affiliation, ranged from 3.07 to 3.72. The competency/self-fulfillment factor ranked fourth and had reasons predominantly in the 3.34 to 3.43 range although a few were also in the more neutral range of 2.98 to 3.01. In general, all four factors had relatively high mean scores and this indicates that they can be considered to be important reasons for continued volunteer participation.

The remaining two factors - service recognition and appreciation and relationship to work had mean scores that ranged from neutral to untrue reasons for continued volunteer participation. The factor service recognition and appreciation, which ranked fifth, had a range of 2.32 to 3.25. The factor relationship to work ranked last and had a mean score range of 2.11 to 2.96. It is of some interest that the lowest ranked items in

these latter two factors tended to be extrinsic motives. In the service recognition and appreciation factor, social status reasons ranked lowest whereas in the relationship to work those reasons related specifically to a person's job or work were the lowest.

It is important to note that this ranking of the various factors is at best somewhat subjective since various reasons within factors often span over a wide range of mean scores. However, it does give a general indication of the importance of one grouping of motives over another.

Upon examining the thirty eight reasons and their factors in terms of individual VTOs, some important differences emerge. In particular, with the WTA, the most important factors for continued participation were outdoor recreation followed by preservation cause/altruism which contrasts with the reverse trend for the total of the three groups. With the TNF, preservation cause/altruism was the most important reason but it was followed by social affiliation instead of outdoor recreation. Following third was the factor competency/self-fulfillment. A few of the top ranked outdoor recreation reasons ranked on par with the top ranked self-fulfillment/competency reasons. However, these former reasons were much more spread out amongst the entire range of mean scores. For example, such relatively high ranking reasons as relaxation, physical exertion and keep healthy were rated considerably lower by TNF volunteers. Outdoor recreation, therefore, seems to rank fourth behind the other three factors for the TNF although overlapping somewhat with competency/self-fulfillment. In contrast to the WTA and TNF, the GDTA seemed to adhere to the general ranking of the factors found in the totals for the three groups.

E. Relationship to the Propositions and Literature

In this part of the chapter, the results of the previous sections are compared against the propositions stated in Chapter 1 of this study. Each proposition is stated, then is followed by a discussion of the findings in those sections applicable to the

proposition. In addition, this material is interpreted in light of the related literature.

The First Proposition

Volunteers will tend to most enjoy those volunteer activities and leisure activities that are more like leisure and involve direct contact with the outdoors or with historical or recreational events. These activities will show higher levels of perceived freedom and intrinsic motivation and will be more associated with self-interest motivations.

Motivation in Six Types of Volunteer Activities. This proposition was partially supported by the results in this section. Trail construction and maintenance tended to be the most enjoyed volunteer activity, in terms of the total score for all three VTOs. The Curnan *et al*. (1979) study also had similar results with volunteers showing a definite preference for trail maintenance followed by trail construction. Trail construction and maintenance also had the highest perceived freedom score which suggests that, for many volunteers, this activity is considered to be leisure. It is also an activity that takes place outdoors.

Also in support of this proposition was the fact that enjoyment and perceived freedom were positively correlated. Since perceived freedom is the prime component of leisure (according to Neulinger's 1981 paradigm of leisure), the experience of leisure is dependent on perceived freedom being present. This suggests that because enjoyment and perceived freedom are correlated, both are likely to be associated with experiencing leisure. This may indicate that as both enjoyment and perceived freedom increase for any given activity, so is the likelihood of the activity to be considered leisure.

There were, however, some anomalies in the findings which do not entirely support the above proposition. The activity of research (research, planning and design) rated high in terms of the total score for both the measures of enjoyment and perceived freedom, ranking second behind trail construction and maintenance. It is therefore evident that many volunteers view research as being a leisure experience. It was thought that this activity would not be popular because much of it takes place indoors and

involves the preparation of plans and research reports. It may, however, entail some fieldwork in either routing the trail or planning facilities along it. Outings/events, on the other hand, ranked third both in terms of enjoyment and perceived freedom. However, it was expected to have ranked higher because it is associated with the outdoors and with recreational and historical events. Only in the case of the GDTA did this activity rank as high as trail construction/maintenance. However, in relative terms this activity still rated a mean score of 4.0 in both enjoyment and perceived freedom, which also suggests that volunteers consider it to be leisure.

Probably the most interesting result which puts the proposition into question is the relatively high mean scores of all six activities (with a range between 3.8 and 4.4 for level of enjoyment and between 3.5 and 4.2 for perceived freedom). This indicates that these volunteers do not generally feel that volunteering in these activities is non-leisure or work like. On the whole, they believe they have free choice and that in general there is some degree of enjoyment associated with all the activities. This of course does not negate the fact that some activities are more enjoyed and participated in more freely than others. The results indicate that the activities construction/maintenance, research, and outings and events are considered freely chosen and enjoyable activities and as such are likely to be considered more like leisure than other lower scoring activities such as administration or publicity.

Motivation in Preferred and Disliked Volunteer Activities. The findings in this section support the proposition that volunteers would tend to enjoy those volunteer activities involving direct contact with the outdoors or with historical or recreational events. In terms of the total figures, trail maintenance and construction was considered the most enjoyable volunteer activity. The Curnan *et al.* (1979) study also supported these findings. The results also found that outdoor recreation was the most enjoyed leisure activity. All of these activities are highly involved with being in the outdoors.

This proposition is also highly supported by the fact that both perceived freedom and intrinsic motivation were rated high for most enjoyed volunteer activities. The classification in Neulinger's (1981) paradigm of leisure would suggest that these activities fall into the realm of Pure Leisure. This classification denotes a combination of higher perceived freedom with intrinsic motivation. This proposition was particularly supported by the fact that the mean scores for perceived freedom and intrinsic motivation for most enjoyed volunteer activity very closely approached those of the most enjoyed leisure activity. These findings indicate that trail volunteers have a high degree of self-determination in choosing to volunteer in favorite activities and that they obtain personal satisfaction from doing this type of activity for its own sake.

The results also showed that perceived freedom and intrinsic motivation were positively correlated. The proposition's expectation that there would simultaneously be higher levels of both perceived freedom and intrinsic motivation in association with most enjoyed volunteer activities is therefore supported.

The above proposition also suggested that the most enjoyed volunteer activity would rate high in terms of self-interest as opposed to altruistic motivations. It was thought that if perceived freedom, intrinsic motivation and enjoyment were high, then much of the rewards would accrue to the self and be perceived as such by those doing the activity. Although it was expected that this would occur, the findings suggested a mixture of altruism and self-interest motivations, with a leaning towards altruism.

This latter finding is of some significance since it indicates that although a volunteer activity can be freely chosen and intrinsically satisfying' and therefore experienced as leisure, the main goals of the activity can also be altruistic in nature. An alternate explanation, however, is that people may have been reluctant to indicate that self-interest motives were more important to them than altruistic motives. The wording of the question might have made it more socially desirable for respondents to indicate altruism motives ("to help others or to aid the cause of the organization") as opposed to

self-interest motives ("for my own interests and goals").

The Second Proposition

Volunteers will tend to least enjoy those volunteer activities that are more like non-leisure and involve administrative or otherwise demanding duties or chores in the organization. These activities will show lower levels of perceived freedom and intrinsic motivation and will be more associated with altruistic motivations.

Motivations in Six Types of Volunteer Activities. The findings in this section partially support the proposition. The activities ranked lowest in terms of both enjoyment and perceived freedom were administration and publicity. T-tests on the six activities also showed significant differences between administration and publicity and the highest ranked construction/maintenance for both level of enjoyment and perceived constraint/freedom. Both administration and publicity take place indoors and involve duties most often associated with paperwork, clerical chores, meetings, or business. The Curnan *et al*. (1979) study reported similar results with trail volunteers indicating a distaste for administrative tasks such as paperwork and attending meetings.

However, the results also showed some disparity with the proposition. Both of the above activities nevertheless had high scores suggesting some degree of perceived freedom and enjoyment. Therefore, they would fit into the realm of leisure as opposed to non-leisure (or work). Two explanations are put forward to explain this apparent anomaly. Firstly, those who participate in administration and publicity may actually enjoy them (although less than they do other activities such as trail construction and maintenance). Those who do not participate in them may in fact not enjoy these activities and therefore have made the decision not to get involved. This may suggest that people do not freely volunteer for things that they do not enjoy. In this regard, the act of volunteer participation is in itself an act of free choice. Following from this, if rewards such as enjoyment are not obtained, then people drop out. Thus, a process of natural selection may in fact be taking place. If volunteers are participating, they do so from their own free will and because they enjoy it. Those that don't enjoy it make the free

choice not to participate.

A second explanation is that people may be rationalizing their participation. They may not particularly enjoy some of the activities but report that they do to rationalize their continued participation. Similarly, they may indicate free choice in continuing to participate in order to justify a sense of self determination that they may not in fact feel. This suggests that the aspect of social desirability may be taking place in the answering of this question.

Motivation in Preferred and Disliked Volunteer Activities. The findings tended to support this proposition with administration being chosen by many respondents as the least enjoyed volunteer activity. This result was also consistent with the Curnan *et al*. (1979) study. In the current study, administration tasks such as board meetings, secretarial duties and financial tasks appeared to be associated with either tedious or work-like chores which many apparently felt were a waste of time, boring and time consuming. Many also felt they lacked the necessary skills to adequately perform the duties.

As expected, the findings showed that volunteers tended to be motivated by perceived constraint as opposed to perceived freedom when participating in tasks they least enjoyed. However, instead of being motivated by extrinsic motivation, which was expected, volunteers had more of a mixture of intrinsic and extrinsic motivation with a leaning toward the former. This suggests that trail volunteers are not content only with recognition, appreciation or external incentives, but also require a certain amount of satisfaction from doing the activity itself even though by its nature, the activity is felt to be undesirable. Alternatively, social desirability may have been an influence in the answering of this question. Because of the wording of the question, respondents might have felt it more desirable to choose intrinsic motivation (a feeling of satisfaction from doing the activity itself) over extrinsic motivation (appreciation, recognition or an incentive from others).

It was expected that volunteers would be motivated by altruism rather than self-interest motives when participating in unfavorable activities and this was supported in the results. This tendency towards altruism as a motive may suggest that intrinsic personal satisfaction derives from helping others or aiding the cause of the organization as opposed to serving one's own interests and goals.

When compared to Neulinger's (1981) paradigm of leisure, it is evident that the least enjoyed volunteer activity falls into the category of Work - Job and is considered non-leisure. Work-Job occurs when perceived constraint is present with intrinsic and extrinsic motivation. An example of this situation might be a volunteer who is obligated to attend board meetings and work on projects because he/she has been elected as a director. He/she requires some external rewards (e.g. recognition, social power and appreciation), but is just as likely to seek internal satisfaction for the actual work he/she performs.

The Third Proposition

The most enjoyed volunteer activities will tend to be related to most enjoyed leisure activities both in terms of the type of activity and the motivations for doing the activity.

Motivation in Preferred and Disliked Volunteer Activities. The findings in this section strongly support this proposition. When respondents were asked for their motives for enjoying their favorite volunteer and leisure activities in general, the results showed some similarities between the two types of activities. The major reasons for most enjoying the favorite leisure activity were outdoors/nature, creativity/learning, relaxation and exercise/health. For most enjoyed volunteer activity, the reasons were: outdoors/nature, accomplishment, altruism and exercise/health. Similarities between these two sets of findings were evident with the identical motives of outdoors/nature and exercise/health. The differences suggested that volunteers also want some form of accomplishment and that they want to work towards a cause or to help others in their

volunteer work. Other differences between the two sets of motives signified that they valued creativity/learning and relaxation as important motivations for their favorite leisure activity..

The proposition was further substantiated when specific activities and their underlying motivations were examined. Most respondents indicated that outdoor recreation was their favorite leisure activity and they also indicated that trail work was their favorite volunteer activity. There are some obvious similarities between these two types of activities. Both occur in the outdoors and in a natural setting and involve some form of physical exercise. When asked for their reasons for enjoying each of these specific activities, again similarities were evident. Major reasons for enjoying outdoor recreation consisted of outdoors/nature, followed by exercise/health and relaxation. Predominant reasons for enjoying trail work were outdoors/nature, followed by exercise/health and accomplishment. Thus, there is evidence to suggest that volunteers have similar motives for participating in outdoor recreation and trail work.

In summary, there appears to be a definite similarity between most enjoyed leisure activities and most enjoyed volunteer activities, both in terms of the type of activity and the motivations for doing the activity. The differences that occur seem to point to an additional need for volunteers to accomplish something in their activity as well as work towards a cause or to help others. On the other hand, when participating in a leisure activity, volunteers tend to also need relaxation and to creatively use their minds.

The Fourth Proposition

The reasons or motives for participation deemed most important to trail volunteers will be primarily intrinsically and self-interest motivated and will be connected with experiencing the recreational, historical or natural opportunities of the outdoors.

Reasons for Starting to Volunteer. In general, the findings of this section supported the proposition. The most important reason (chosen by almost one third of

the respondents) was enjoyment of nature and the outdoors. This reason encompasses both intrinsic and self-interest motivations and is associated with outdoor recreation and experiencing the aesthetics of nature. The second ranked reason, nature/history concern, was not as supportive of this proposition, since it tended to reflect more instrumental and altruistic motives.

These findings are also somewhat consistent wth the results of the Curnan *et al*. (1979) study, which indicated that trail volunteers were first attracted to VTOs because of their interest in outdoor activities and nature. The main disparity between the two studies occurred with the item nature/history concern. In the present study, this item ranked second overall, while the corresponding motive concern for the environment ranked last in the Curnan *et al*. study.

Reasons for Continuing to Volunteer. The proposition was only partially supported by the findings of this section. Although the general literature on volunteers indicates that motivations are made up of both self-interest and altruistic motivations, the findings of Curnan *et al*. (1979), on which this proposition was based, suggests that the top reasons were motivated by self-interest and intrinsic motivation. The top four reasons in the Curnan *et al*. (1979) study were: to have contact with nature, for personal fulfillment, for a sense of accomplishment, and for physical exercise. These reasons were also very much related to experiencing nature and the out-of-doors. Instead, the findings of the present study suggested that the most important group of motivations were associated with the factor preservation cause/altruism. This is in direct contrast to the Curnan *et al*. (1979) study where these motives were almost non-existent. The nearest reasons in the Curnan *et al*. study were to fulfill civic duty and to have some say about natural resource management. These reasons ranked fifth and eighth, respectively, in that study.

It is evident in the present study that trail volunteers are not only interested in rewards accrueing only to themselves, but they are willing to work on what they believe

is a worthwhile cause. Integral to this cause is the long range preservation of the natural or historical resources associated with the trail corridor. This package of motivations is associated with advancing a cause (Weinberg, 1975) or with an expression of belief (Allen, 1980). This choice of the preservation cause/altruism factor also suggests that the VTOs and their volunteers have a stong instrumental function (see Babchuk and Edwards, 1965; Edwards and Booth, 1973; Jacoby, 1965; Jacoby and Babchuk, 1963). Organizations and individuals that are instrumentally oriented tend to go after long range goals that they perceive have a positive impact on the community. Satisfaction accrues when these goals are met.

It is very difficult to classify the reasons associated with advancing a cause as being either intrinsically or extrinsically motivated. It is suggested that this would be highly dependent on the person and the situation since there is no inherent basis to believe that one type of motivation would be present at the exclusion of the other. It is suspected that advancing a cause that one believes in would have elements of both intrinsic and extrinsic motivation connected with it. One aspect of advancing a cause, because of its long term nature, is that immediate internal rewards are not always attainable and therefore it is is suspected that extrinsic rewards are needed to sustain the motivation. However, if projects associated with longer term goals are relatively small and provide challenging situations, there is no reason to believe that these tasks could not be intrinsically motivated.

Much of the support of this proposition arises from the fact that outdoor recreation was a highly ranked factor, being second in importance only to the preservation cause/altruism factor. The high importance of this motive is supported by the Curnan *et al*. (1979) study. It is evident that outdoor recreation is highly connected with experiencing the recreational, historical or natural opportunities of the outdoors. In addition, it appears evident that this factor leans heavily towards both self-interest and intrinsic types of motivation. Situations and activities associated with the outdoor

recreation factor are likely to present challenge and stimulation and immediate opportunities to conquer these challenges. Thus, there is high potential to obtain internal satisfaction and feelings of competency and self-determination (Deci, 1975).

VI. SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

A. Summary

The problem addressed in this study consisted of determining the social-psychological motives affecting volunteer participation and to describe other social and demographic characteristics of active core volunteers in three volunteer trail organizations in Alberta. In addition, the intent was to assess the degree to which these active volunteers perceived their volunteer activities or experiences as being leisure or non-leisure.

With respect to the socio-economic and demographic characteristics of trail volunteers, three major categories of variables were examined in this study - life cycle variables (age, sex and marital status), socio-economic status (income, education, employment status and occupation) and residential variables (urban vs. rural and size of community). The results with respect to these variables were all compared against the 1981 census figures for Alberta. For certain variables, the findings differed from the census population. The major trends for these variables are reported below.

With regard to life cycle variables, volunteers tended to be those who were middle aged, male and married. The findings also indicated that socio-economic status was positively related to volunteer participation. Most trail volunteers tended to be well educated, have higher than average incomes and were employed in professional, technical or managerial occupations. With respect to the residential variables, the results showed a similarity to the 1981 census figures for Alberta. Therefore, these variables could not be used to indicate distinguishing characteristics of volunteers.

A major purpose of this thesis was to determine the trail volunteers' motives for participating in volunteer activities and to evaluate the degree to which they perceived these activities as being leisure or non-leisure. To this end, four propositions were formulated in order to assess the findings of this study against what would be expected

based on past research. This section will list each proposition and summarize the relevant results.

The First Proposition. Volunteers will tend to most enjoy those volunteer activities and leisure activities that are more like leisure and involve direct contact with the outdoors or with historical or recreational events. These activities will show higher levels of perceived freedom and intrinsic motivation and will be more associated with self-interest motivations.

In general, the results of the two sections covering this area supported much of the proposition. With respect to the six volunteer activities studied, trail construction and maintenance exhibited the highest scores for level of enjoyment and level of perceived constraint/freedom.

The findings on most enjoyed and least enjoyed volunteer activities indicated that the majority of volunteers most enjoyed the volunteer activity of trail construction and maintenance and the leisure activity of outdoor recreation, both of which involve direct contact with the outdoors. These activities also exhibited high levels of perceived freedom and intrinsic motivation. In this regard, the ratings for perceived freedom and intrinsic motivation for most enjoyed volunteer activity (trail construction and maintenance) closely approached that of most enjoyed leisure activity (outdoor recreation). Because of these findings, it is evident that both of these activities fall into the category of Pure Leisure, as put forward in Neulinger's (1981) paradigm of leisure.

Although it was expected that self-interest would be an important motivator for enjoyable volunteer activities, the findings indicated a mixture of altruism and self-interest motives with a leaning toward the former motive. This suggests that although a volunteer activity can be experienced as leisure, the goals of the activity can be both altruistic as well as serving the self-interest needs of the individual. It might also mean that social desirability was an influence on the answering of this question with respondents being more reluctant to admit self-interest as a motive.

The correlations undertaken on the various motivational elements also support this proposition. For the results in the six volunteer activities, level of enjoyment and

perceived constraint / freedom were found to have a relatively strong positive relationship. With respect to the findings on most enjoyed and least enjoyed volunteer activities, extrinsic / intrinsic motivation and perceived constraint / freedom also had a positively correlated relationship of moderate strength. Together, these results suggest that the elements of enjoyment, intrinsic motivation, and perceived freedom (and by implication - leisure) are related. Therefore, it implies that when a high level of one of these motivational elements is present, then the other elements may also expect to similarly, have high levels.

The Second Proposition. Volunteers will tend to least enjoy those volunteer activities that are more like non-leisure and involve administrative or otherwise demanding duties or chores in the organization. These activities will show lower levels of perceived freedom and intrinsic motivation and will be more associated with altruistic motivations.

In general, the results of the two sections covering this area partially supported this proposition. Of the six activities studied, administration and publicity had the lowest scores both in terms of enjoyment and perceived freedom. In the other section on preferred and disliked activities, most volunteers chose administration as the least enjoyed volunteer activity over other activities. Specific tasks under administration that were least enjoyed consisted of board meetings, secretarial duties, and fundraising.

As was expected, volunteers tended to be motivated by perceived constraint and altruism when participating in their least enjoyed volunteer activity. However, instead of being motivated by extrinsic motivation as predicted, volunteers indicated that they were motivated by both intrinsic and extrinsic motivation with a leaning toward the former type of motivation. When analyzed in terms of Neulinger's (1981) paradigm of leisure, these results indicate that the least enjoyed volunteer activity falls into the category of Work - Job which is considered non-leisure. These results may indicate that when participating in non-enjoyable and obligated activities, volunteers still expect some internal satisfaction in addition to the external rewards of appreciation and recognition. The volunteers' internal reward could come from the knowledge that he or she has helped others or aided the cause of the organization. In other words, intrinsic rewards

may accrue from participation in altruistic acts. Alternatively, social desirability might have been a factor in answering this question with respondents' being more reluctant to say they were influenced by extrinsic rewards.

It should also be noted that there is a discrepancy between the above noted findings on least enjoyed volunteer activity and the section on the six volunteer activities. Specifically, the results on the six activities refute the above findings in terms of administration or any volunteer activity being non-leisure to most participants. When examining the mean scores for perceived freedom and enjoyment in the six volunteer activities, it was evident that the lowest ranked administration and publicity had mean scores that still indicated a certain amount of enjoyment and perceived freedom. The results suggested that most respondents felt some perceived freedom and a certain positive degree of enjoyment when participating in these two activities.[10] Because of this result, administration and publicity could not be classified as non-leisure in terms of Neulinger's (1981) paradigm of leisure.

A few explanations are put forward to explain this discrepancy. Firstly, there is the possibility that there is a problem with validity in either the six activities section or in the preferred and disliked volunteer activity section. Secondly, people may be reporting relative satisfaction with the six activities because they are described in the questionnaire in a general manner. For example, for the category of administration, a number of activities and tasks are included. It was only when they were asked in an open-ended question to specifically state what activity they least enjoyed did the low perceived freedom scores occur. Therefore, a person might indicate that he or she tolerated administration as a whole in the one section of the questionnaire but least enjoyed a specific aspect of administration in the other section. Third, almost 40 percent of volunteers either did not have a least enjoyed volunteer activity or did not

[10]Only a minority of respondents registered perceived constraint when participating in these two activities. For these people, the two activities were probably considered non-leisure.

respond to the question. This suggests that many people do not have a least enjoyed volunteer activity because they have made the decision to only participate in those activities that they enjoy and which provide perceived freedom. This would explain why all six activities could have relatively high scores. Fourth, people may be rationalizing their participation in less desirable activities such as administration or publicity and may not in fact feel a great deal of enjoyment or perceived freedom when participating in these activities. The results may reflect a certain amount of social desirability on the part of the participants when answering the questions on the six activities.

Notwithstanding this discrepancy, both sets of results indicate that administrative tasks were considered lower in enjoyment and perceived freedom and therefore were the least leisure-like to volunteers as compared to the other volunteer activities.

The Third Proposition. The most enjoyed volunteer activities will tend to be related to most enjoyed leisure activities both in terms of the type of activity and the motivations for doing the activity.

This proposition was strongly supported in the findings. In terms of the type of activities, it was found that the favorite volunteer activity was trail construction and maintenance whereas the favorite leisure activity was outdoor recreation. Motives for the two activities were also similar with both involving an enjoyment of nature and the outdoors and physical exercise. The results also indicated a definite similarity between the two activities in terms of perceived freedom and intrinsic motivation. Because of these latter results, both types of activities were considered to be Pure Leisure as noted in Neulinger's (1981) paradigm of leisure.

The Fourth Proposition. The reasons or motives for participation deemed most important to trail volunteers will be primarily intrinsically and self-interest motivated and will be connected with experiencing the recreational, historical or natural opportunities of the outdoors.

This proposition was partially supported. In both the reasons for starting and reasons for continuing to volunteer, the top two reasons dealt with the enjoyment of nature and the outdoors and with concern for the preservation of historical and natural

resources. However, in the reasons for starting to volunteer, outdoors/nature ranked first followed by nature/history concern, whereas these two motives were reversed in the reasons for continued volunteer participation. In this regard, the preservation cause/altruism factor ranked first followed by the outdoor recreation factor. The fact that enjoyment of outdoors and nature ranked high in both questions supports the proposition. This reason can be considered intrinsically and self-interest motivated and is definitely connected with experiencing the recreational or natural opportunities of the outdoors.

The foregoing text has provided a general profile of the social and motivational characteristics of trail volunteers in the three VTOs. There were, however, some definite differences between the three VTOs that varied from the general trends described earlier in this chapter. Volunteers in the GDTA tended to be younger than the other three groups with over 80 percent under the age of 40 years. There was also a greater propensity for them to be single.

Volunteers in the TNF had the most characteristics that differed from the general profile of volunteers. Of the three VTOs, TNF volunteers had been active in the organization for the shortest period of time. They were more likely to volunteer alone and preferred to take a leadership or coordinating role in their volunteer activities. As opposed to the other VTOs, these volunteers tended to live in a variety of urban and rural settings and to work in towns or small cities. The activity category of trail construction and maintenance was not considered important to TNF volunteers. Few volunteers tended to participate in this activity and those that did rated it low in perceived freedom. Further, trail construction and maintenance ranked last as the most enjoyed volunteer activity. Instead, most volunteers participated in outings and events followed by administration. These latter two activities were also their most enjoyed volunteer activities. TNF volunteers did not consider outdoor recreation as important a reason for first starting to volunteer and for continuing to participate. Instead, they

expressed much more of a concern for preservation of natural and historical resources. Finally, the results on mean level of enjoyment and perceived freedom for the six volunteer activities suggested that the TNF may have an overall lower level of satisfaction with their volunteer activities in comparison to the other two VTOs.

In comparison to the other two groups, WTA volunteers had been active wth their VTO for the longest period of time. The WTA had the oldest volunteers of the three VTOs with approximately 45 percent over 50 years of age. For WTA volunteers, the most important reason for continued volunteer participation was outdoor recreation in contrast to the other two VTOs who chose preservation cause/altruism.

This summary of differences between the three groups indicates that TNF volunteers have some motivational characteristics that are different from those in the other two VTOs. On the whole, these can be explained by the different orientation of the organization's functions. For example, the low ranking of trail construction and maintenance can be explained by the fact that this work is not normally done by the volunteers but is contracted out to paid employees. In addition, it is believed that the Athabasca Landing Trail is viewed by the TNF more as an historical corridor than as a wilderness recreation trail. This may explain why motives associated with the enjoyment of the outdoors and nature are ranked so low.

B. Theoretical Implications and Recommendations

A number of implications and recommendations for future research have arisen from this study. They are as follows:

1. One of the major subproblems addressed in this thesis was to evaluate the degree to which volunteers in the three VTOs perceived their volunteer activities as being leisure or non-leisure. Neulinger's (1981) "Paradigm of Leisure" was used to determine how various volunteer activities fit into either the leisure or non-leisure spheres, based on the degree to which people felt freedom or constraint and

intrinsic or extrinsic motivation. The findings indicated that the most enjoyed volunteer activity fell into the Pure Leisure cell in the Neulinger paradigm whereas the least enjoyed volunteer activity fell into the Work Job cell of the model. As such, the former could be considered leisure whereas the latter would be considered non-leisure. Because the most enjoyed and least enjoyed activities seem to be at opposite extremes, it is expected that other activities that are less intensely liked or disliked would fall into other cells of the paradigm between Pure Leisure and Work Job. The area between these two cells may represent a spectrum of cells in which various types of trail volunteer activities could be classified based on their association with feelings of perceived freedom/constraint or intrinsic/extrinsic motivation.

The evidence accumulated in this thesis therefore suggests that trail volunteers can experience their activities as either leisure or non-leisure and this is somewhat dependent on the type of activity in which they participate. The study showed that the distinction between leisure and non-leisure can be activity specific and is based on the volunteer's perception of whether the activity satisfies certain motivational needs. Some activities seemed to be more "capable" than others of producing higher levels of enjoyment, perceived freedom and intrinsic motivation and therefore were felt as leisure to participants (e.g., trail construction and maintenance). In many cases, these activities had certain attributes such as involving outdoor activity and interaction with the natural environment. Other activities were more associated with perceived constraint, lower levels of intrinsic motivation and enjoyment and therefore were experienced as non-leisure (e.g. administration). The findings indicated that some of these non-leisure activities also contained certain characteristics. They often occurred indoors and consisted of tasks normally associated with the work environment (e.g., board meetings and secretarial work).

Based on the above discussion, it is recommended that further research be undertaken wth Neulinger's (1981) paradigm of leisure to test its applicability as a predictor of leisure and non-leisure activities. In addition, future studies should continue to examine attributes of volunteer activities to see if they are more associated with leisure or with non-leisure.

2. Notwithstanding the findings outlined above, the results also suggest that in general, most volunteer activity is experienced more as leisure than non-leisure. The findings regarding the six volunteer activities indicated that all six activities had relatively positive perceived freedom scores which would make them fall within the leisure side of the Neulinger paradigm. An explanation for this was that volunteers have exercised choice in their decisions to volunteer for certain activities and have chosen those activities that provided them with some satisfaction. It is postulated that when they encountered activities that failed to provide satisfaction in the past, they chose to drop out. Therefore, it is believed that those activities that are still participated in are the products of a selection process wherein non-leisure activities have been dropped from a person's volunteer activity repertoire. The aspect that free choice is available when a person makes a decision to volunteer in an activity or not is perhaps the key variable that sets much volunteer activity apart from non-leisure or work.

   It is recommended that future research look at the dynamics of volunteer participation in less desirable activities. Specifically, research should examine whether volunteers tend to drop out of activities they do not like or alternatively, whether people tend to persevere with these activities and if so, for what reasons.

3. The research results also showed that there was a great deal of similarity between favorite volunteer and leisure activities. In this regard, the favorite volunteer

activity of trail construction and maintenance had very similar motivational attributes as the favorite leisure activity of outdoor recreation in terms of perceived freedom, intrinsic motivation and reasons for participating. In addition, the findings indicated that important reasons for starting and continuing to volunteer for the VTO had to do with outdoor recreation. This preference for outdoor recreation represents the expressive side of the VTO. On the basis of these findings, there is evidence to suggest that there is a certain spillover effect of leisure expectations and experiences into the voluntarism sphere. It is possible that participation in certain recreation and leisure activities may lead to participation in volunteer organizations where similar activities take place. In addition, people may join those organizations (e.g. Alberta Wilderness Association) which function to preserve and safeguard outdoor recreational opportunities and non-use values associated with park and wilderness areas. Therefore, it is postulated that there can be a definite relationship between a person's leisure activities and his/her volunteer activities. It is therefore recommended that further investigation take place into the possible relationship between people's volunteer activities and the way they spend their leisure time.

4. The most important set of reasons for continuing to participate in VTOs centred around a concern for the preservation of the trail and its natural and historical resources. It is evident that trail volunteers place some importance on the option values, existence values and bequest values associated with the trail. These motives represent the instrumental and altruistic side of the organization. Satisfaction accrues to individuals from the knowledge that they have contributed to the long term goal of preserving the trail. It was not expected that volunteers would place such emphasis on this set of motives but it is evident that they are indeed a driving force behind the organization. It is therefore recommended that future studies look more in depth at this altruistic side of volunteer participation and determine if it is

also present to the same degree in other similar organizations.

5. The results showed that both self-interest and altruism motives are important to volunteers. In the question on reasons for volunteer participation, the most important reasons were outdoor recreation (which represents self-interest and intrinsic motives) and concern for the preservation of historical and natural resources (which represents altruistic motives). The results from the motivational scales on most enjoyed and least enjoyed volunteer activities also indicated that people were motivated by feelings of altruism as well as intrinsic motivation. It is evident that volunteers want to obtain intrinsic satisfaction from doing the activity for its own sake but at the same time, they also wish to contribute to a worthwhile cause. It is therefore put forward that these types of motivations are intertwined with one another and may reflect a symbiotic relationship that is perhaps unique to volunteer organizations. This special combination of altruistic and self-interest motives are perhaps what sets voluntarism apart from the spheres of work and leisure. As such, it is recommended that future research also examine whether similar combinations of altruism and self-interest motivations occur in other volunteer organizations.

6. Much of the voluntarism literature indicates that appreciation and recognition are important ways to motivate volunteers. However, the results of the study indicated that extrinsic rewards such as appreciation, recognition and external incentives were not prime motivators. Only for least desirable activities did these types of extrinsic rewards show a reasonable score. Even then, volunteers indicated that intrinsic rewards were slightly more important. In addition, the results on reasons for continued volunteer participation showed that the service recognition and appreciation factor ranked lowest of all factors. In contrast, it was evident that intrinsic rewards were important motivators. On the whole, respondents indicated

that they wanted to obtain intrinsic satisfaction and enjoyment from participating in volunteer activities. It is therefore recommended that future research explore the relative importance of intrinsic and extrinsic rewards as volunteer motivators. In particular, studies should specifically examine whether extrinsic rewards such as appreciation and recognition do in fact motivate volunteers as the popular volunteer literature seems to claim.

7. The results provided a socio-economic and demographic profile of active trail volunteers. This profile was generally supported by research conducted on other recreational, sport and environmental organizations. These findings would suggest that there is a relationship between certain socio-economic and demographic characteristics of people and their tendency to volunteer in specific types of organizations. It is therefore recommended that further research be undertaken to determine if these trends occur in other recreational organizations.

8. The questionnaire instrument used in this study was relatively successful in providing useful information on trail volunteers. However, certain refinements could be undertaken to improve it for future studies, as follows:

   a. Some changes should be made to the two sections which ask motivational questions on volunteer activities. Specifically, the questions should contain identical scales so that the results can be more precisely compared.

   b. For the two questions on reasons for starting and reasons for continuing to volunteer, it is recommended that the content and format of the questions be more similar so that more accurate comparisons can be made.

   c. With respect to reasons for continued participation, the thirty eight reasons in the questionnaire have been reduced down to six factors. It is recommended that a few representative questions be obtained from these factors in order to make up a smaller set of questions for future studies.

d. Additional questions on family structure should be added to the section on socio-economic and demographic characteristics. Specifically, these questions should ask for the number of children in the family and their ages. Other studies (e.g. Knoke and Thomson, 1977) have found family life cycle variables to be correlates of volunteer participation.

Although this instrument was designed to be used with VTOs, certain refinements (specifically in the types of activities offered) would allow it to be used for other volunteer organizations. It is therefore recommended that replication studies be done on other VTOs as well as on other types of volunteer organizations to see if the results in this study are supported.

C. Implications and Recommendations for Volunteer Trail Organizations

The study provided information that could be used in an applied sense by volunteer trail organizations. In this regard, a number of implications and recommendations are provided as follows:

1. The study results indicated that volunteers in the three VTOs had certain social and motivational attributes. In terms of recruitment of volunteers for VTOs, consideration should be given to the demographic and socio-economic characteristics outlined in this study in order to target market potential members for membership drives. Since the results also show that trail volunteers are interested in hiking and other outdoor recreation activities, consideration should be given to recruiting members of other outdoor recreation groups as well as individual hikers and other outdoor enthusiasts. Alternatively, VTOs might consider expanding their target market to include different types of people not highly represented in their groups. In this regard, membership recruitment might be targeted to those people with different demographic and socio-economic characteristics than those already existing in the VTOs.

2. The results indicated that many volunteers least enjoyed doing administrative activities and, in particular, attending board meetings. Reasons for least enjoying these activities included such things as: a waste of time, lack of time, lack of skills, and tedious or boring. It may therefore be useful for executive members of the board of directors to consider taking additional training courses in organizing and conducting board meetings.

3. The results indicated that volunteers obtain leisure experiences from their volunteer activities. Traditionally, volunteers have been considered "workers" and often managed as such. Although management theories continue to be valid in relation to certain functions of the organization, it is also advisable to recognize voluntarism as a leisure phenomenon. The results indicate that some activities such as trail maintenance and construction and outings and events are experienced as leisure to many volunteers. It is important that this not only be recognized but that efforts should continue to optimize the opportunities for this type of experience for members. These activities can provide recreation and rejuvenation to individuals and it is suggested that they may provide added incentive to undertake other tasks and activities that are less desirable in the organization. For example, it may be worthwhile to combine tasks that are unsavoury with those that are experienced more as leisure. In that way, people will obtain some intrinsic satisfaction and pleasure from the leisure-like activities and may still be motivated to participate in the less desirable activities, particularly if they know that these activities are contributing to the cause of the organization.

4. The results suggested that volunteers find certain motivational elements to be important when they participate in volunteer activities. These are enjoyment, perceived freedom, intrinsic motivation and altruism. In all volunteer activities and tasks, it is important to preserve volunteers' perception of freedom and choice

and recognize that satisfaction and enjoyment may occur from doing the activity itself. Activities should be stimulating and provide opportunities for mental and/or physical challenge. When people master challenging tasks, they obtain feelings of accomplishment. This serves to fulfill important human needs of feeling competent and self-determining. Other rewards in volunteer activities may be altruistic in nature and include a sense of knowing that one is helping others or contributing to the cause of the organization. It is believed that this latter type of volunteer work also gives people a sense of satisfaction.

5. The most important set of reasons for continued volunteer participation consisted of commitment to the preservation of the trail and its natural and historical resources. Knowledge that one is contributing to this cause and that overall progress towards these goals are being met, may provide internal satisfaction to the volunteer. In this regard, altruism and working towards a cause may be highly rewarding. It may therefore be of some importance for an organization to look at its progress on both short and long term goals and periodically give some acknowledgement and recognition for its own achievements. Vehicles for doing this are articles in the newsletter, board meetings and annual general meetings, and when people get together for various activities and tasks. This may be particularly important when people are doing what they consider undesirable tasks. Knowledge that their contribution is bringing the organization that much closer to building or preserving the trail may give volunteers enough satisfaction to persevere and continue with the task.

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Appendix A - The Three Alberta Volunteer Trail Organizations

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The Great Divide Trail Association

The Great Divide Trail Association is a VTO with its base of operations in Calgary, Alberta. This association had its origins in the summer of 1974 when an initial feasibility survey by a group of young people showed promise for the development of the Great Divide Trail between Banff and Waterton Lakes National Parks. A task force was subsequently set up in November, 1974, and one year later, the Great Divide Trail Association was formed. It "became incorporated under the Federal Corporations Act as a non-profit organization in April 1976" (Great Divide Trail Association, 1976:6).

The Association sees its role as follows:

> The Great Divide Trail Association is a non-profit organization dedicated to the establishment of a protected corridor for The Great Divide Trail and to the initiation of the Trail's construction and maintenance outside the National and Provincial Parks (Great Divide Trail Association, n.d.).

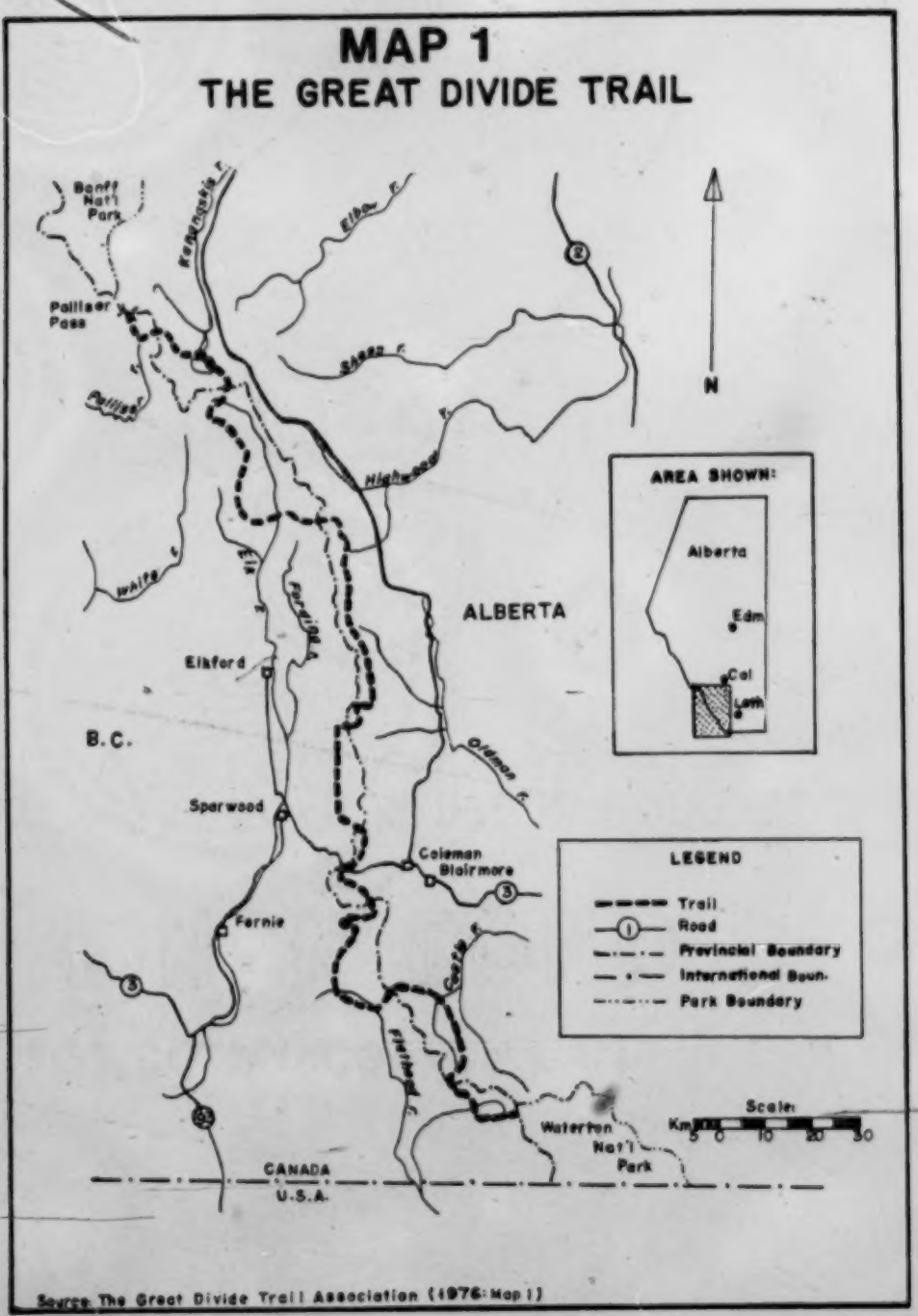
A secondary role of the Association seems to be directed towards environmental concerns as noted in the following statement:

> Conservation of areas adjacent to the Continental Divide, as well as promotion of wildland recreational activities, are major concerns of the Great Divide Trail Association (Great Divide Trail Association, n.d.).

The Association is overseen by a nine member board of directors which meets monthly throughout the year. Senior positions typically include president, vice-president, treasurer, secretary, trail development coordinator, membership director, newsletter editor, publicity editor, and legal advisor (Great Divide Trail Association, 1981). Membership in the organization has totalled around 140 persons for the past number of years. Most of the membership consists of people from Calgary and surrounding area.

The Great Divide Trail is conceived as both a long distance trail and a backbone to a system of trails in what is largely forest reserve land in Alberta and British Columbia (See Map 1). As such, its proposed route runs between Banff and Waterton Lakes

MAP 1
THE GREAT DIVIDE TRAIL



Source: The Great Divide Trail Association (1976: Map 1)

National Park and it crosses the continental divide at several passes along the way. The following description of the Trail is offered in the Association's publicity brochure:

> The Great Divide Trail is visualized as a hiking and horse trail running along adjacent to, or over the Continental Divide. Its proposed route outside of the National Parks traverses both valley and alpine regions, however, the trail will be located primarily in sub-alpine areas. . . . Ideally the Great Divide Trail will act as the backbone of a network of trails within provincially owned land in Alberta and British Columbia. This trail network would form the basis for a protected recreational corridor within which new and conflicting developments (logging, mining, seisnic operations and other commercial and industrial activities) would be restricted (Great Divide Trail Association, n.d.).

At present, approximately 70-80 km. of the trail has been cleared and blazed. This section of the trail exists wholely in Alberta and stretches from Fording Pass to the Oldman River.

Waskahegan Trail Association

The Waskahegan Trail Association is based out of Edmonton, Alberta and it administers the Waskahegan Trail. The original idea for the Waskahegan Trail began with the Oil City Kiwanis Club, who conceived of a hiking trail near Edmonton as a centennial project. In 1968, the Waskahegan Trail Association was established and took over the administration role from the Kiwanis Club. The following year (1969), the Association became a registered society under the Societies Act.

The Association sees its role as building and maintaining a hiking trail in the Edmonton area, introducing interested people to the trail, and promoting a conservation ethic (Skirrow, 1981:pers. comm.). This is perhaps best evidenced in the following exerpt from the Waskahegan Trail Guide Book (Waskahegan Trail Association, 1978:1):

> The Association is making a fairly long circular trail called the Waskahegan Trail. To introduce parts of the Trail to new members and to provide get-togethers for all hikers, the Association arranges group hikes. The Association also works with other organizations in promoting hiking and in taking an interest in the care Albertans take of land.

The Association is run by an executive board of directors which meets every month throughout the year. There are approximately 200 members in the organization

and this number has not varied to any degree over the past 10 years, even though there has been some turnover of members. Most members are from Edmonton, but the Association also has members from Wetaskiwin, Camrose, Fort Saskatchewan, Sherwood Park and St. Albert (Skirrow, 1982:pers.comm.).

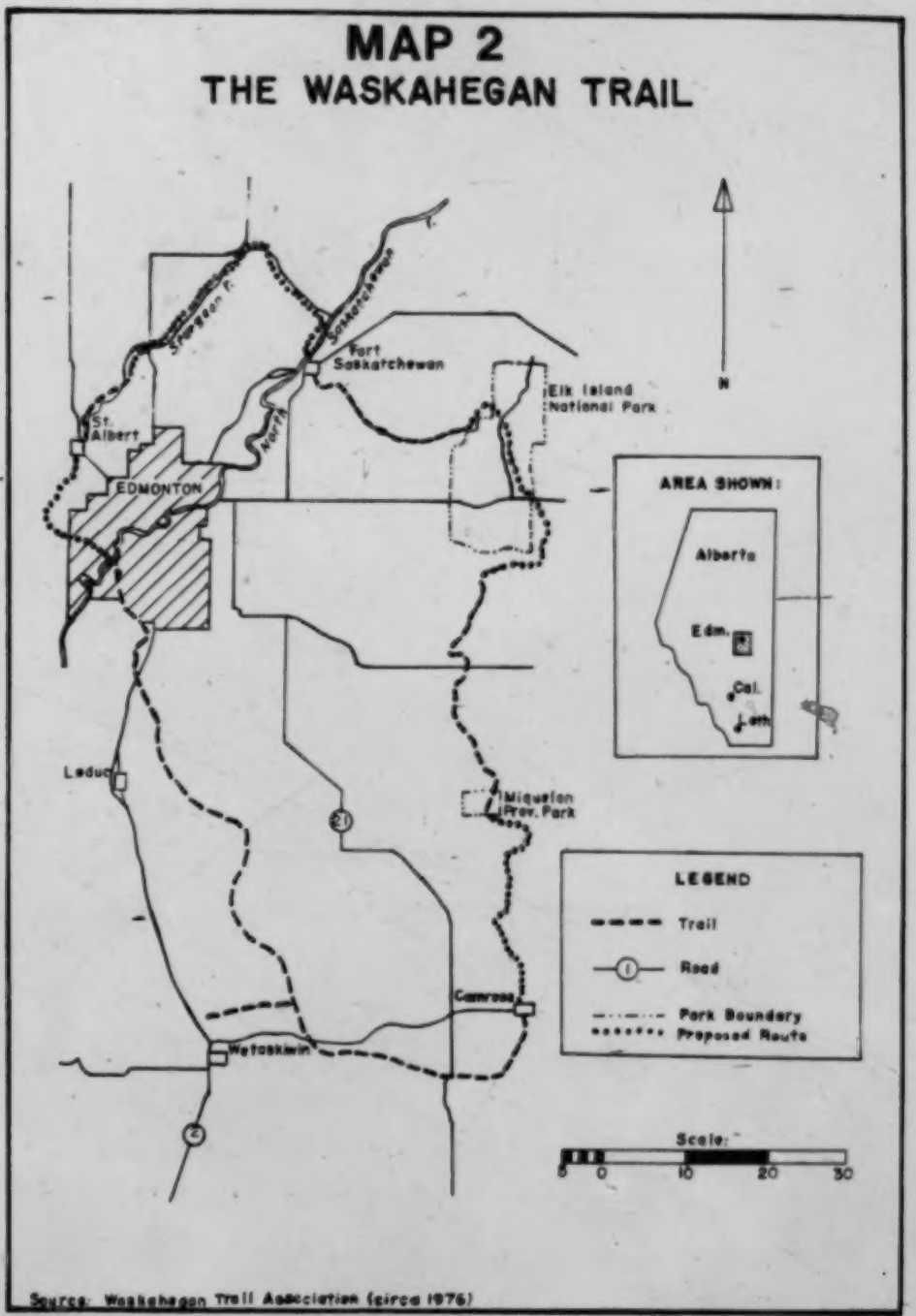
The Waskahegan Trail itself is 200 km. long. The trail makes a circular route around the outlying environs of Edmonton and is located in a predominantly rural type of environment (See Map 2). As such, it follows a route south and east of Edmonton and takes in such areas and environments as Blackmud Creek, Coal Lake, the Wataskiwin/Camrose region, Battle River, the Beaver Hills, Elk Island National Park and the area around Fort Saskatchewan.

Trail North Foundation

The Trail North Foundation oversees the historic Athabasca Landing Trail and has its headquarters in Edmonton, Alberta. The idea for a foundation to administer the trail was first initiated by Joachim Czypionka, a former manager of Fort Edmonton Park and Mary Lobay, who was a member of the Alberta Historic Sites Board in the mid 1970's. They were both instrumental in gathering together a group of concerned people to form the Trail North Foundation in 1976.

The Foundation "is incorporated as a non-profit organization in Alberta. . . and is registered as a charitable society by Revenue Canada" (Capalta Concepts Ltd., 1978:1). Jock Czypionka (1981:pers. comm.), the former Project Manager for the foundation, has noted that the Foundation is under an interesting organizational structure in that it is legally considered a non-profit company. It is permitted to enter into commercial transactions as long as the monies so gained are used for charitable purposes. As such, Czypionka has observed that the Foundation is in a unique position to raise money to build and maintain the trail and its facilities over a long period of time.

MAP 2
THE WASKAHEGAN TRAIL



Source: Waskahegan Trail Association (circa 1976)

The Foundation sees its role and purpose as follows:

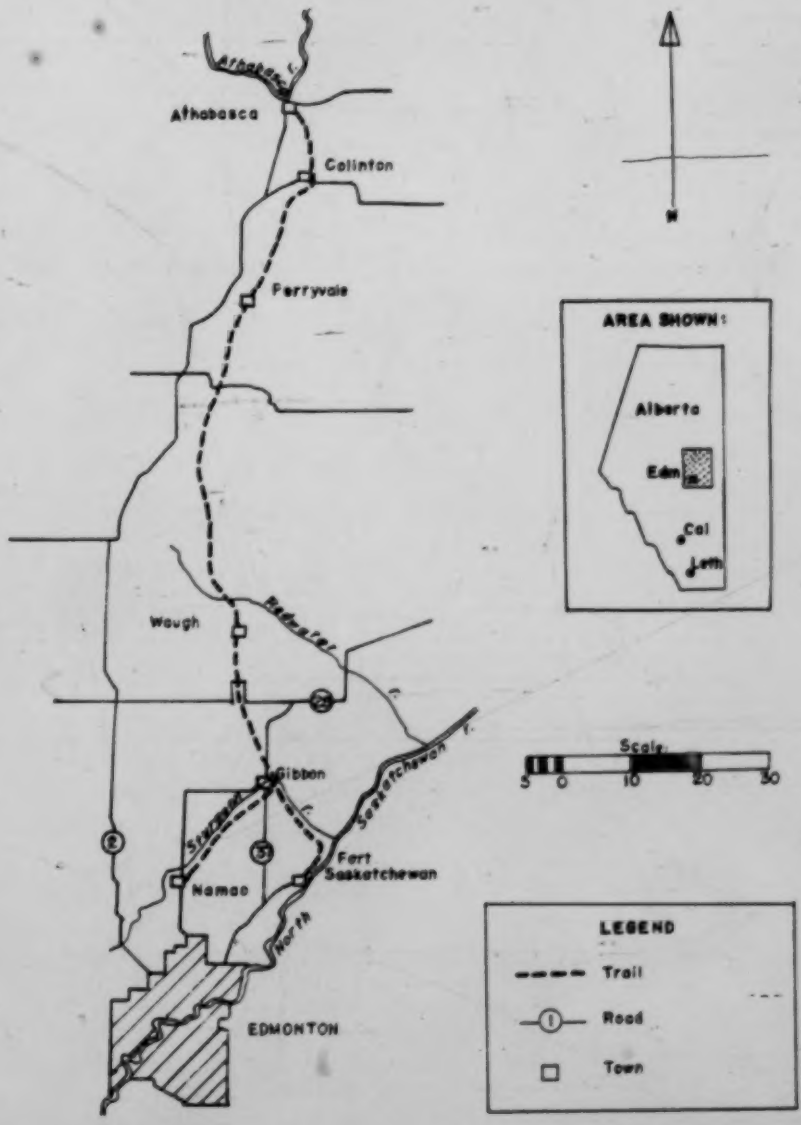
1. to preserve the historic Athabasca Landing Trail;
2. to protect and to restore structures which are located adjacent to the Trail and which constitute important elements suitable for the interpretation of our human heritage;
3. to identify and to protect areas of interesting natural (biophysical) attributes, which are deemed suitable for conservation, interpretation and recreation; and
4. to develop recreational and educational opportunities and facilities of a broad range which would complement the historic character of the Trail.
(Calpalta Concepts Ltd., 1978:1)

The foundation is made up of a board of directors, five of which are elected from the general membership. The rest are ex-officio members of which six are appointed from towns adjacent to the Trail, and three are appointed from local tourist associations and chambers of commerce. At present, there are approximately 150 members in the Foundation.

Czypionka (1981:pers. comm.) has noted that there is approximately 60 miles still in existence of the original 75 mile long Athabasca Landing Trail. Presumably, this means that 15 miles of the trail has been plowed up or destroyed in some manner.

The plan for the Athabasca Landing Trail envisages development of the trail within a corridor concept. As such, the proposed corridor essentially would run from the confluence of the Sturgeon and North Saskatchewan Rivers northward to the Town of Athabasca. It would also take in a short stretch of the Sturgeon River Valley between Nameo and Gibbons (See Map 3).

MAP 3
THE ATHABASCA LANDING TRAIL



Source: Capalta Concepts Ltd. (1978: Map 1)

Appendix B - The Questionnaire and Survey Correspondence

WHY DO VOLUNTEERS PARTICIPATE IN VOLUNTEER TRAIL ORGANIZATIONS?

-A Survey of Three Alberta Trail Organizations

TRAIL NORTH FOUNDATION

GREAT DIVIDE TRAIL ALBERTA-BRITISH COLUMBIA GTD

HIKE ALBERTA'S WASKAHEGAN

This study is being done to better understand why volunteers participate in three trail organizations in Alberta - the Great Divide Trail Association, the Trail North Foundation and the Waskahegan Trail Association. We hope that the results obtained in this research will help your trail organization in the future management of its volunteer program.

This research is supported by:

Brian Prior, President
Great Divide Trail Association

Bill Kostiw, President
Trail North Foundation

Quentin Mix, President
Waskahegan Trail Association

Department of Recreation Administration
Faculty of Physical Education and Recreation
The University of Alberta
Edmonton, Alberta, T6G 2H9

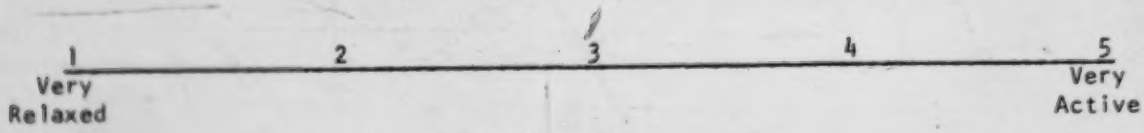
Directions

Please answer all of the questions. Please try to select the best response for each question even if more than one response may be partially true for a given question. If you wish to comment on any question or qualify your answers, please use the margins or the last page of the questionnaire.

Most questions will be self-explanatory. However, one type of question format that you may not be familiar with is presented below as an example.

Example

In general, how active are you when you participate in activities or tasks in the Trail North Association? (Circle number)



In order to answer such a question, you would circle the number which best represents your feelings about the statement. For example:

Circling 1 would indicate that you were very relaxed
Circling 2 would indicate that you were relaxed but had some activity
Circling 3 would indicate that you were equally relaxed and active
Circling 4 would indicate that you were active but had some relaxation
Circling 5 would indicate that you were very active

A. Volunteer Participation Characteristics

This first set of questions deals with your participation in the Trail North Foundation.

1. How many years have you been a volunteer in the Trail North Foundation?

   _____ YEARS

2. Who do you normally volunteer with when you participate in the activities or tasks of the Trail North Foundation? (Circle the number of your answer)

   1 ALONE
   2 SPOUSE
   3 OTHER RELATIVE
   4 FRIEND OR FRIENDS
   5 OTHER MEMBERS OF ORGANIZATION
   6 SPOUSE OR OTHER RELATIVE AND FRIENDS
   7 SPOUSE OR OTHER RELATIVE AND MEMBERS
   8 OTHER - SPECIFY _____

3. Why did you first start volunteering for the Trail North Foundation? (Circle any two of the numbers corresponding to answers that are most applicable to you)

   1 I HAD A SENSE OF OBLIGATION AS A TRAIL USER
   2 I ENJOY NATURE AND THE OUTDOORS
   3 FOR SOCIAL CONTACT AND TO MEET PEOPLE
   4 I WAS ASKED BY A FRIEND OR ANOTHER VOLUNTEER
   5 BECAUSE OF MY CONCERN FOR THE ENVIRONMENT OR HISTORICAL PRESERVATION
   6 I HAD PREVIOUS EXPERIENCE WITH OTHER VOLUNTEER GROUPS
   7 I WAS A HIKER WHEN I STARTED AND THERE ARE HIKING AND OTHER OUTDOOR ACTIVITIES IN THIS ORGANIZATION
   8 FOR A SENSE OF INVOLVEMENT OR ACCOMPLISHMENT
   9 OTHER - SPECIFY _____

4. In general, what is your preference regarding the management and supervision of volunteers? (Circle number)

   1 I PREFER TO LEAD AND COORDINATE
   2 I PREFER TO ASSIST IN COORDINATING
   3 I PREFER TO FOLLOW INSTRUCTIONS WITHOUT SUPERVISION
   4 I PREFER TO FOLLOW INSTRUCTIONS WITH SUPERVISION
   5 OTHER - SPECIFY _____

5. In an average year, how many hours do you spend doing volunteer activities or tasks in the Trail North Foundation? (Circle number)

   1 1 - 48 HOURS
   2 49 - 120 HOURS
   3 121 - 240 HOURS
   4 241 - 480 HOURS
   5 OVER 480 HOURS

B. Leisure and Volunteer Activities

In order to gain insight into why people participate in volunteer activities, it is important to understand the type of activities they enjoy (or don't enjoy) and why they participate. Therefore in this next section, you will be asked questions on three different types of activities:

1) Your Most Enjoyed Volunteer Activity
2) Your Least Enjoyed Volunteer Activity
3) Your Most Enjoyed Leisure Activity

1. **Most Enjoyed Volunteer Activity**

a. What volunteer activity or task in the Trail North Foundation do you currently **enjoy** doing the **most**?

_____

b. Please describe briefly why you **enjoy** doing this volunteer activity or task.

_____

_____

c. In general, why do you participate in this volunteer activity or task? (Circle a number on each of the scales below which correspond to your feelings)

1	2	3	4	5
I Feel Compelled By My Obligations To Do It				I Want To Do It

1	2	3	4	5
To Help Others Or To Aid The Cause Of The Organization				For My Own Interests And Goals

d. In general, what do you normally want to receive from doing this volunteer activity or task? (Circle number)

1	2	3	4	5
Appreciation Or Recognition Or An Incentive From Others				A Feeling Of Satisfaction From Doing The Activity Itself

2. **Least Enjoyed Volunteer Activity**

a. What volunteer activity or task in the Trail North Foundation do you currently **enjoy** doing the **least**?

_____

b. Please describe briefly why you **least enjoy** doing this volunteer activity or task.

_____

_____

c. In general, why do you participate in this **least enjoyed** volunteer activity or task? (Circle a number on each of the scales below which correspond to your feelings)

1 — 2 — 3 — 4 — 5

I Feel Compelled By My Obligations To Do It ... I Want To Do It

1 — 2 — 3 — 4 — 5

To Help Others Or To Aid The Cause Of The Organization ... For My Own Interests And Goals

d. In general, what do you normally want to receive from doing this **least enjoyed** volunteer activity or task? (Circle number)

1 — 2 — 3 — 4 — 5

Appreciation Or Recognition Or An Incentive From Others ... A Feeling Of Satisfaction From Doing The Activity Itself

3. **Most Enjoyed Leisure Activity**

a. What activity or pastime do you **enjoy** doing the **most** during your leisure or free time? (Note - You may wish to put down a specific acitivity or pastime (eg. basketball, knitting, etc.) or a general type of activity or pastime (eg. sports, crafts, etc.). This activity or pastime may consist of anything you do in your life)

_____

b. Please describe briefly why you enjoy doing this activity or pastime

_____

_____

c. In general, why do you participate in this activity or pastime? (Circle number)

1 — 2 — 3 — 4 — 5

I Feel Compelled By My Obligations To Do It ... I Want To Do It

d. In general, what do you normally want to receive from doing this activity or pastime? (circle number)

1 — 2 — 3 — 4 — 5

Appreciation Or Recognition Or An Incentive From Others ... A Feeling Of Satisfaction From Doing The Activity Itself

C. Volunteer Activities

Another important aspect of understanding volunteer participation has to do with obtaining information about the types of activities or tasks in which volunteers participate. Therefore, we would like to ask some questions about your own participation in the various categories of volunteer tasks and activities.

Do you currently participate in any jobs or activities in the Trail North Foundation that can be classified under the following categories? (Refer to boxes at right of each category for examples of jobs or activities usually found under the category).

1. **Administration**
   See box for examples (Circle number below)

Some Examples:
- -Attending Board of Director or committee meetings
- -Secretarial, financial, fundraising or membership work

1 NO – Go directly to question 2 on next page

2 YES

a. How much do you enjoy participating in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5

Not At All — Very Much

b. In general, why do you participate in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5

I Feel Compelled By My Obligations To Do It — I Want To Do It

2. **Research, Planning and Design**
See box for examples
(Circle number below)

Some Examples:
-Research, planning and designing the trail and its route and facilities
-Preparation of master plans, research reports and related documents

1 NO - Go directly to question 3 below

2 YES

a. How much do you enjoy participating in the(se) task(s) or activity(ies)? (Circle number)

1 — 2 — 3 — 4 — 5
Not At All — Very Much

b. In general, why do you participate in the(se) task(s) or activity(ies)? (Circle number)

1 — 2 — 3 — 4 — 5
I Feel Compelled By My Obligations To Do It — I Want To Do It

3. **Outings and Events**
See box for examples
(Circle number below)

Some Examples:
-Leading organized trail outings
-Organizing socials or special events
-Conducting educational seminars or workshops.

1 NO - Go directly to question 4 on next page

2 YES

a. How much do you enjoy participating in the(se) task(s) or activity(ies)? (Circle number)

1 — 2 — 3 — 4 — 5
Not At All — Very Much

b. In general, why do you participate in the(se) task(s) or activity(ies)? (Circle number)

1 — 2 — 3 — 4 — 5
I Feel Compelled By My Obligations To Do It — I Want To Do It

4. **Publicity**
See box for examples
(Circle number below)

Some Examples:
-Preparation and use of newsletters, media announcements, publicity slideshows, and publications

1 NO - Go directly to question 5 below

2 YES

a. How much do you enjoy participating in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5
Not At All — Very Much

b. In general, why do you participate in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5
I Feel Compelled By My Obligations To Do It — I Want To Do It

5. **Liason and Negotiation**
See box for examples
(Circle number)

Some Examples:
-Negotiation and ongoing liason with landowners and government
-Public participation in environmental, historical conservation, or park issues
-Negotiation with government for legislative protection of trail

1 NO - Go directly to question 6 on next page

2 YES

a. How much do you enjoy participating in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5
Not At All — Very Much

b. In general, why do you participate in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5
I Feel Compelled By My Obligations To Do It — I Want To Do It

6. **Trail and Facility Construction And Maintenance**
See box for examples
(Circle number below)

Some Examples:
- -Actual construction and marking of new Trail
- -Annual or seasonal trail maintenance
- -Construction and maintenance of trail facilities
- -Acquisition and maintenance of equipment and tools
- -Supervision and training of trail crews
- -Monitoring or wardening of trail and facilities

1 NO - Go directly to question 7

2 YES

a. How much do you enjoy participating in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5

Not At All — Very Much

b. In general, why do you participate in the(se) task(s) or activity(ies)? (Circle number)

1 2 3 4 5

I Feel Compelled By My Obligations To Do It — I Want To Do It

7. Out of the time you spend volunteering for the Trail North Foundation, how frequently do you volunteer in each category of volunteer activity noted previously in this section? (Circle a number on each of the scales below which corresponds to your frequency of participation. If you don't currently participate in any one of the activities, place a mark in the box labelled DON'T PARTICIPATE).

1 Administration
☐ DON'T PARTICIPATE
1 2 3 4 5
Seldom — Very Frequently

2 Research, Planning and Design
☐ DON'T PARTICIPATE
1 2 3 4 5
Seldom — Very Frequently

3 Outings and Events
☐ DON'T PARTICIPATE
1 2 3 4 5
Seldom — Very Frequently

4 Publicity
☐ DON'T PARTICIPATE
1 2 3 4 5
Seldom — Very Frequently

5 Liason and Negotiation
☐ DON'T PARTICIPATE
1 2 3 4 5
Seldom — Very Frequently

6 Trail and Facility Construction and Maintenance
☐ DON'T PARTICIPATE
1 2 3 4 5
Seldom — Very Frequently

D. Reasons For Continued Volunteer Participation

Listed below are a number of statements which are possible reasons for volunteers to **continue participating** *in trail organizations. You are asked to mark the appropriate box to the right of the statement that corresponds to your feelings on each statement.*

VERY UNTRUE FOR ME means that you feel very strongly that the statement is untrue for you
UNTRUE FOR ME means that you simply feel the statement is untrue for you
NEUTRAL means that you feel that the statement is neither true or untrue, that you feel neutral about the statement
TRUE FOR ME means that you simply feel the statement is true for you
VERY TRUE FOR ME means that you feel very strongly that the statement is true for you
If you feel that the statement has nothing whatsoever to do with your experience, mark N/A (Not Applicable) beside the statement.

I continue to volunteer for the Trail North Foundation for the following reasons:
(Please mark one box for each statement)

	VERY UNTRUE FOR ME	UNTRUE FOR ME	NEUTRAL	TRUE FOR ME	VERY TRUE FOR ME
1. To fulfill a sense of public duty					
2. To be involved in leading or managing others					
3. To help bring the family together more often					
4. To relax physically or mentally					
5. Because I feel an obligation to the organization for what it has done for me					
6. To express my concern for natural or historical resources					
7. To create or preserve something that will be around when I'm gone					
8. Because I have friends involved in the organization					
9. To experience a primitive lifestyle or method of work					

	VERY UNTRUE FOR ME	UNTRUE FOR ME	NEUTRAL	TRUE FOR ME	VERY TRUE FOR ME
10. Because volunteering is the next best thing to having a job in this area					
11. To help keep me in shape and to feel healthy					
12. To solve problems and make decisions					
13. To develop and use my skills and talents					
14. Because the organization's activities are related to other recreational activities I enjoy					
15. To work on a project I believe is worthwhile					
16. To make contacts or obtain training leading to a job or career					
17. To obtain a sense of belonging to a group or being part of a team					
18. To develop new interests or to learn new things					
19. To obtain a backcountry experience with relative security					
20. To feel confident and self-sufficient in the outdoors					
21. To get away from the family for a while					
22. To be in the outdoors and have contact with nature					
23. To create or preserve something that will be used by future generations					
24. Because of the sense of adventure involved in the activities or tasks					
25. To do things that are different from my work or occupation					

	VERY UNTRUE FOR ME	UNTRUE FOR ME	NEUTRAL	TRUE FOR ME	VERY TRUE FOR ME
26. For the good feelings brought about by physical exertion					
27. For the sense of comradeship amongst companions					
28. To meet new people					
29. Because I feel I am needed in this organization					
30. To learn what I am capable of achieving					
31. For a sense of self fulfillment and personal growth					
32. To get away from urban civilization for awhile					
33. To obtain respect from people I care about					
34. To appreciate the aesthetic appeal and solitude of the natural environment					
35. To do things that are similar to my occupation					
36. To provide outdoor recreational opportunities for others					
37. Because it brings me a certain status to belong to this organization					
38. Because I feel appreciated by the organization					
IF YOU THINK THERE ARE ANY OTHER REASONS THAT ARE IMPORTANT TO YOU, PLEASE LIST THEM BELOW					
39.					
40.					

E. Characteristics of Volunteers

Finally, we would like to ask a few questions about yourself for statistical purposes.

1. Your Sex (Circle number of your answer)

   1 MALE
   2 FEMALE

2. Your present age (Circle number)

   1 UNDER 18
   2 18-29
   3 30-39
   4 40-49
   5 50-59
   6 60-69
   7 70 AND OVER

3. Your present marital status (Circle one number only)

   1 SINGLE - NEVER MARRIED
   2 NOW MARRIED
   3 COMMON-LAW
   4 DIVORCED
   5 SEPARATED
   6 WIDOWED

4. What is the highest level of education that you have completed? (Circle number)

   1 NO SCHOOLING
   2 SOME ELEMENTARY
   3 COMPLETED ELEMENTARY
   4 SOME JUNIOR HIGH
   5 COMPLETED JUNIOR HIGH
   6 SOME HIGH SCHOOL
   7 COMPLETED HIGH SCHOOL
   8 SOME VOCATIONAL, TECHNICAL OR NURSING SCHOOL
   9 COMPLETED VOCATIONAL, TECHNICAL OR NURSING SCHOOL
   10 COLLEGE DIPLOMA OR CERTIFICATE
   11 SOME UNIVERSITY
   12 UNIVERSITY BACHELOR'S DEGREE
   13 SOME UNIVERSITY GRADUATE WORK
   14 UNIVERSITY GRADUATE DEGREE

5. Where is your place of residence located? (Circle number)

   1 RURAL FARM (HOUSEHOLDS OF FARM OPERATORS)
   2 RURAL NON-FARM (HOUSEHOLDS OF NON-FARM OPERATORS)
   3 VILLAGE
   4 TOWN
   5 SMALL CITY
   6 LARGE CITY (EDMONTON, CALGARY, RED DEER, LETHBRIDGE, MEDICINE HAT)
   7 OTHER (SPECIFY) _____

6. What is your current employment status? (Circle all numbers that apply to you)

1 IN SCHOOL
2 KEEPING HOUSE → Go directly to question 7
3 EMPLOYED FULL TIME
4 EMPLOYED PART TIME
5 UNEMPLOYED
6 RETIRED

a. Please describe your occupation. (If retired or unemployed, please describe your occupation before retirement or unemployment)

TITLE_____

KIND OF WORK YOU DO_____

KIND OF COMPANY OR BUSINESS_____

b. Where is (or was) your place of work located? (Circle number)

1 RURAL FARM (HOUSEHOLDS OF FARM OPERATORS)
2 RURAL NON-FARM (HOUSEHOLDS OF NON-FARM OPERATORS)
3 VILLAGE
4 TOWN
5 SMALL CITY
6 LARGE CITY (EDMONTON, CALGARY, RED DEER, LETHBRIDGE, MEDICINE HAT)
7 OTHER (SPECIFY) _____

7. Which of the income categories below comes closest to your **personal income** for this past year before tax and deductions? (Circle answer)

1 UNDER 5,000
2 5,000-14,999
3 15,000-24,999
4 25,000-34,999
5 35,000-44,999
6 45,000-54,999
7 55,000-64,999
8 65,000-74,999
9 75,000 AND OVER

8. Which of the income categories below comes closest to your **total family income** for this past year before tax and deductions? (Circle answer)

1 UNDER 5,000
2 5,000-14,999
3 15,000-24,999
4 25,000-34,999
5 35,000-44,999
6 45,000-54,999
7 55,000-64,999
8 65,000-74,999
9 75,000 AND OVER

Is there anything else you would like to add concerning the reasons you volunteer in the Trail North Foundation? If so, please use this space for that purpose.

Also, any comments you wish to make that you think may help us to understand volunteer participation in trail organizations will be appreciated, either here or in a separate letter.

Your contribution to this effort is very greatly appreciated. If you would like a summary of the results, please print your name and address on the back of the return envelope (NOT on this questionnaire). We will see that you get it. Thank you again for your cooperation.

THE UNIVERSITY OF ALBERTA

FACULTY OF PHYSICAL EDUCATION
AND RECREATION

Department of Recreation Administration

EDMONTON, ALBERTA, CANADA T6G 2H9 TELEPHONE 432-5171

June 24, 1983

As a volunteer in the Waskahegan Trail Association, you are undoubtedly aware of the valuable work done not only by this organization but by other volunteer trail organizations in Alberta and throughout North America. If one agrees that trail organizations make a useful contribution to society, then it may be of some importance to those of us who wish to encourage trail voluntarism that we understand the driving force of the trail organization - the volunteer. Unfortunately a dilemma exists in that little is known about the volunteer and why he or she participates in trail organizations.

This study proposes to ask active volunteers various questions about why they volunteer, in the hope that the study results will assist trail organizations in the future management of their programs. We are sending this questionnaire to active volunteers in three Alberta trail organizations - the Great Divide Trail Association, the Trail North Foundation and the Waskahegan Trail Association. You have been identified by the Waskahegan Trail Association as being an active volunteer in this organization and as such your opinions are very valuable to this study. In order that the results truly represent the thinking of volunteers such as yourself, we would ask that you complete this questionnaire and return it in the enclosed stamped envelope.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is so we may check your name off the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire.

The results of this research will be made available to the executive of your organization. You may receive a summary of results by writing "copy of results requested" on the back of the return envelope and by printing your name and address below it. Please do not put this information on the questionnaire itself.

I would be most happy to answer any questions you might have. You may write me at the address on the letterhead or by phoning 432-2763. Thank you very much for your assistance in this study.

Sincerely,

Mary Jane Cox

Mary Jane Cox
Project Researcher
Enc.

July 4, 1983

Last week a questionnaire was mailed to you which asked you questions about why you volunteer for your trail organization.

If you have already completed and returned the questionnaire to us, please accept our sincere thanks. If not, would you please do so today. Because it has been sent to only a small but representative number of trail volunteers, it is extremely important that yours be included in the study if the results are to accurately represent the opinions of active volunteers such as yourself.

If by chance you did not receive the questionnaire, or it got misplaced, please call me right now at 439-3087 (collect if outside Edmonton) and I will get another one in the mail to you today.

Sincerely,

Mary Jane Cox
Project researcher

THE UNIVERSITY OF ALBERTA

FACULTY OF PHYSICAL EDUCATION
AND RECREATION

Department of Recreation Administration

EDMONTON, ALBERTA, CANADA T6G 2H9 TELEPHONE 432-5171

August 2, 1983

About a month ago I sent you a questionnaire which sought your views about why you volunteer for the Great Divide Trail Association. We have not yet received your completed questionnaire and therefore would like to remind you that we are still very interested in obtaining your views.

The number of questionnaires returned is very encouraging, but whether we will be able to describe accurately why people volunteer in trail organizations depends upon you and others who have not yet responded.

Your response is very significant to the usefulness of this study. This is due to the fact that your name was selected after a screening by the executive of the Great Divide Trail Association to represent those volunteers who are active in the organization. Therefore, only a relatively small number of members have been chosen from your organization to complete this questionnaire. Because of this, the usefulness of the study directly depends on people like yourself returning their questionnaires.

We would therefore like to encourage you to respond to our study. In the event that your questionnaire has been misplaced, a replacement is enclosed as well as a stamped return envelope.

Your contribution to the success of this study will be appreciated greatly.

Sincerely,

Mary Jane Cox

Mary Jane Cox
Project Researcher
Enc.

P.S. If for some reason you feel that your name should not have been included as an active volunteer in this study, would you please write "Not An Active Volunteer" on the cover of the questionnaire and return it to me. Please note, however, that the criteria for including you as an active volunteer is not necessarily that you contribute a lot of time, but that you are available when called upon or come out on your own accord when needed.

Appendix C - Factor Analysis Statistical Tests

Appendix C - Factor Analysis Statistical Tests

This appendix outlines some of the tests that were performed to check the appropriateness of the factor analysis model. In addition, it explains some ot the tests and the decisions respecting the exclusion or inclusion of certain variables and the choice of the number of factors to be used in the factor solution.

Statistical Tests

A number of statistical tests are normally undertaken after the correlation matrix has been run [11] but prior to the extraction or rotation of factors. This is done to check the appropriateness of using the factor model. These tests are outlined in the SPSSx Advanced Statistics Guide by Norusis (1985), pp. 127-130.

1. Bartlett Test of Sphericity - This test statistic was run on the correlation matrix for the 38 variables and the results were as follows:

   Bartlett Test of Sphericity = 1529.1188
   Significance = .0000

   Because the value of the test statistic is large and the significance is small, the hypothesis that the correlation matrix is an identity matrix was rejected. Therefore, the use of the factor model can be considered appropriate.

2. Kaiser-Meyer-Olkin Measure of Sampling Adequacy - A measure of 0.70861 was obtained for this test. Norusis (1985) stated the following with regard to this index:

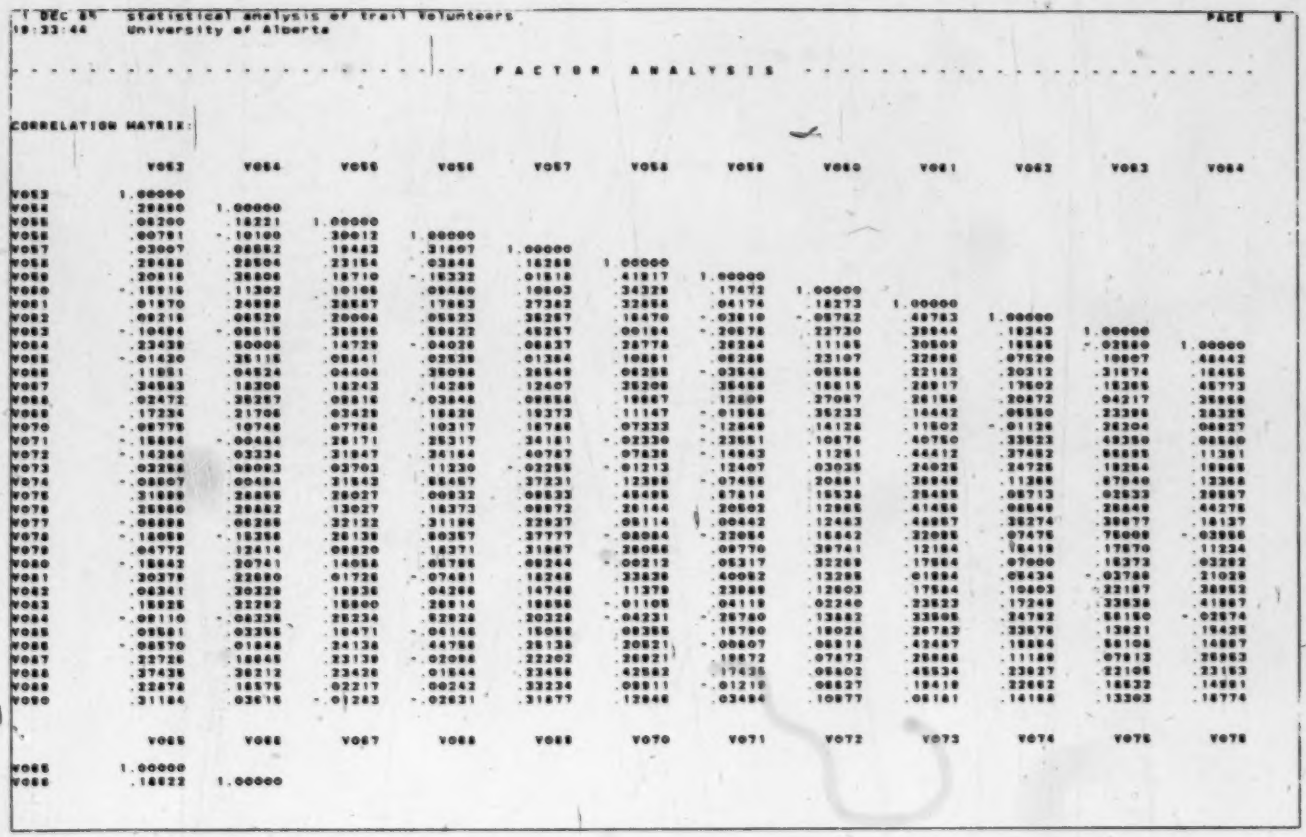
   > Small values for the KMO measure indicate that a factor analysis of the variables may not be a good idea. . . Kaiser (1978) characterizes measures in the 0.90's as marvelous, in the 0.80's as meritorious, in the 0.70's as middling, in the 0.60's as mediocre, in the 0.50's as miserable and below 0.50 as unacceptable.

   Because the test obtained a measure of 0.70861, it can be concluded that the factor analysis model can be used.

[11] The correlation matrix is produced in Figure 5.

Figure 5

Correlation Matrix



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FACTOR ANALYSIS

CORRELATION MATRIX:

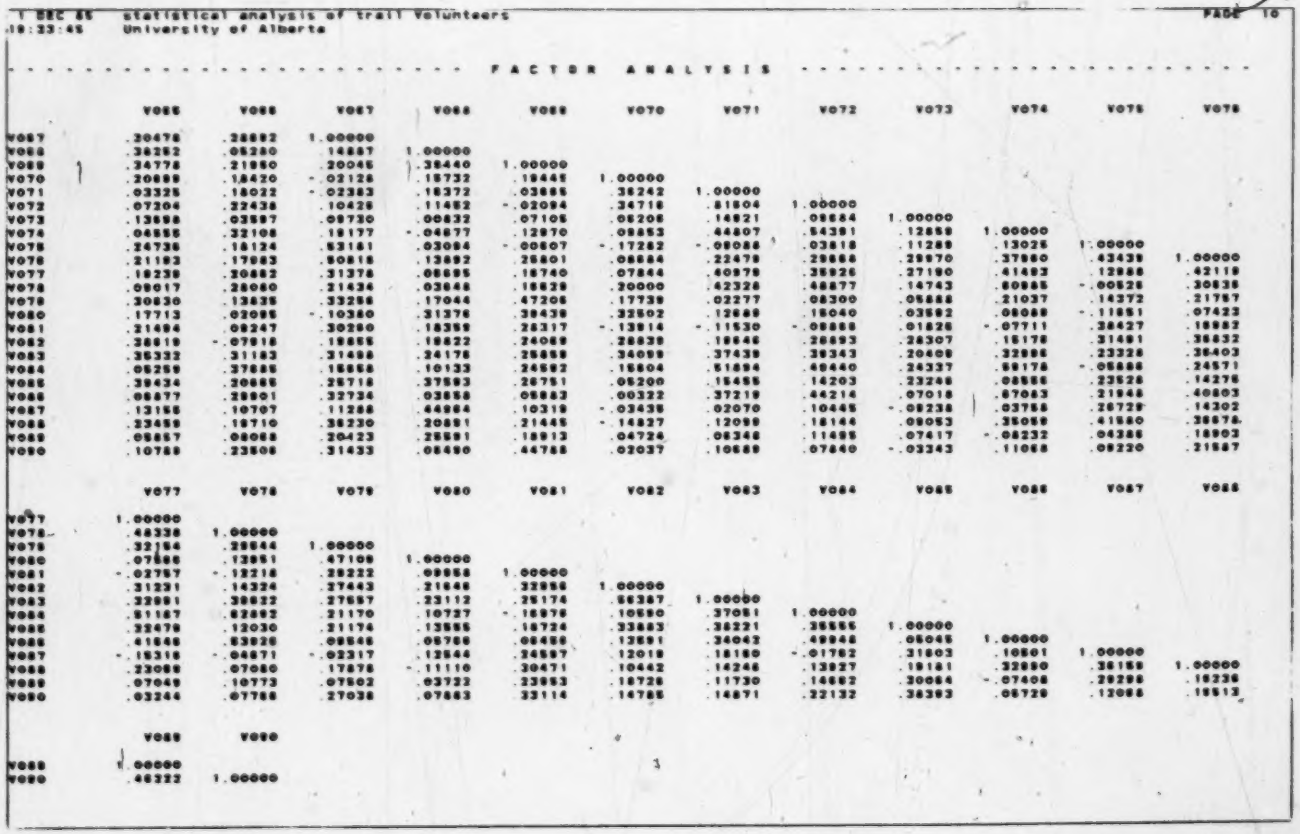
	V083	V084	V085	V086	V087	V088	V089	V090	V091	V092	V093	V094
V083	1.00000											
V084	.28880	1.00000										
V085	.08200	.18221	1.00000									
V086	.00781	-.10100	.30012	1.00000								
V087	.03007	.08852	.19442	.31807	1.00000							
V088	.28488	.28504	.23154	.03848	.16288	1.00000						
V089	.20816	.36806	.18710	-.16332	.01818	.41917	1.00000					
V090	-.18916	.11302	.10106	.09480	.10803	.34329	.17472	1.00000				
V091	.01870	.24888	.28887	.17883	.27382	.32888	.04174	.18273	1.00000			
V092	.08216	.08529	.20006	.05923	.36257	.18470	-.03810	-.05782	.48783	1.00000		
V093	-.10484	-.08618	.38856	.59522	.48257	.00184	-.20678	.22730	.38844	.18243	1.00000	
V094	.23438	.60006	.14728	-.04028	.08837	.28778	.28284	.11185	.30809	.16585	-.02880	1.00000
V095	-.01420	.35116	.08841	.02838	.01384	.10881	.06288	.23107	.32898	.07520	.10007	.68442
V096	.11881	.04524	.04406	.35098	.26849	.06288	-.03548	.08888	.22182	.20312	.31874	.18458
V097	.34883	.18306	.18243	.14288	.12407	.28208	.36488	.18618	.28817	.17802	.18386	.65773
V098	.02472	.38267	.08816	-.03848	.09888	.19887	.12809	.27087	.36188	.20872	.04217	.35888
V099	.17234	.21708	.03428	.18828	.19373	.11147	-.01868	.35233	.14482	.08580	.23388	.23388
V070	-.08778	.10748	.07788	.10317	.18788	.07333	-.12648	.14128	.11802	-.01138	.26304	.06827
V071	-.18884	-.00484	.26171	.25317	.24181	-.02330	-.23651	.10676	.40750	.33823	.49388	.08580
V072	-.14286	.03334	.31847	.24184	.40767	.07428	-.14843	.11281	.44412	.37482	.88885	.11381
V073	.02286	.08883	.03703	.11330	-.02255	-.01213	.12407	.03035	.24028	.26726	.18264	.18868
V074	-.08807	.00484	.31843	.85487	.27231	.12388	-.07488	.20881	.38848	.11388	.87840	.12388
V075	.31888	.28888	.28027	.08832	.08833	.48488	.67814	.15538	.28488	.08713	.02833	.28887
V076	.28880	.28862	.13027	.18373	.08872	.28144	.20502	.12988	.41488	.08848	.28848	.44278
V077	-.08888	.08288	.32132	.31188	.22837	.08114	.00442	.12483	.48887	.35274	.38877	.18137
V078	-.18088	-.18358	.28138	.80357	.37777	-.08084	-.22084	.18842	.32088	.07478	.78008	-.03888
V079	.04772	.12416	.08820	.18371	.31887	.28088	.08770	.30741	.12184	.18418	.17870	.11234
V080	-.18842	.30741	.14088	.08788	.08244	-.00212	.05317	.32288	.17884	.07000	.18373	.03282
V081	.30378	.22880	.01728	-.07481	.18248	.33838	.40082	.13288	.01884	.08434	-.03788	.21028
V082	.08341	.30328	.18838	.04288	.14748	.11378	.23888	.12803	.17884	.10803	-.22187	.28882
V083	.18828	.22282	.18800	.28814	.18888	-.01108	.04118	.02240	.23823	.17248	.33838	.41887
V084	-.08118	-.08338	.28234	.82828	.30328	-.04231	-.26788	.13882	.33808	.24782	.88188	-.02874
V085	.08881	.03388	.18471	-.04148	.15088	.08388	.15788	.18028	.28782	.33878	.13821	.18428
V086	-.08878	.01848	.24138	.44788	.28138	.20821	-.08807	.08818	.42487	.19884	.88108	.14887
V087	.22728	.18848	.23138	-.02088	.22202	.28921	.18872	.07873	.28888	.11188	.07813	.28883
V088	.37438	.38212	.23428	.01844	.33488	.42582	.17438	.08802	.48534	.23827	.22108	.23183
V089	.22878	.18578	.02217	.00242	.33234	.08811	-.01218	.08827	.19418	.22882	.18832	.14881
V090	.31184	.03618	-.01283	-.02831	.31877	.12848	.03484	.10877	.08181	.14188	.13303	.18774

	V085	V086	V087	V088	V089	V070	V071	V072	V073	V074	V075	V076
V085	1.00000											
V086	.18822	1.00000										

Figure 5

Correlation Matrix

(Cont.)



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FACTOR ANALYSIS

	V065	V066	V067	V068	V069	V070	V071	V072	V073	V074	V075	V076
V067	.20478	.28882	1.00000									
V068	.38282	.05280	.14887	1.00000								
V069	.34778	.21860	.20045	.38440	1.00000							
V070	.20688	.18420	-.02126	.18732	.18445	1.00000						
V071	.03325	.18022	-.02383	.18372	.03885	.38242	1.00000					
V072	.07204	.22438	.10428	.11482	-.02094	.34718	.81804	1.00000				
V073	.13898	.03587	.09730	.00832	.07108	.06208	.14821	.08884	1.00000			
V074	.04856	.32108	.19177	-.04877	.12870	.08853	.44807	.54381	.12858	1.00000		
V075	.24736	.18124	.83181	.03084	-.00807	-.17282	-.09048	.03818	.11288	.13025	1.00000	
V076	.21183	.17883	.80818	.13892	.28801	.08844	.22478	.29888	.28870	.37880	.43438	1.00000
V077	.18239	.30882	.31378	.05895	.18740	.07844	.40878	.35926	.27180	.41482	.12888	.42118
V078	.09017	.28060	.21434	.03848	.18828	.20000	.42328	.48877	.14743	.80885	-.00528	.30838
V079	.30830	.13835	.33288	.17044	.47208	.17738	.02277	.08300	.05888	.21037	.14272	.21787
V080	.17713	.02085	-.10380	.31378	.38438	.32502	.12888	.18040	.03582	.08088	-.11881	.07423
V081	.21484	.08247	.30280	.18388	.28317	-.13814	-.11530	-.08888	.01828	-.07711	.28427	.18882
V082	.38818	-.07818	.18885	.18822	.24088	.28838	.18846	.28893	.28307	.18178	.31481	.38832
V083	.35332	.31183	.31488	.24178	.25888	.34088	.37438	.38343	.20408	.32886	.23328	.38403
V084	.05258	.37885	.18888	.10133	.24582	.18804	.81884	.48440	.24337	.88178	-.05888	.24571
V085	.38434	.20885	.28718	.37883	.28751	.05200	.15485	.14203	.23248	.08886	.23528	.14278
V086	.08877	.28801	.32734	.03858	.05883	.00322	.37218	.44214	.07018	.87083	.21948	.40803
V087	.13188	.10707	.11288	.44884	.10318	-.03438	.02078	.10445	-.08238	.03758	.28728	.14302
V088	.23488	.18718	.38238	.20881	.21445	-.14827	.12088	.18144	.08053	.35058	.41880	.38878
V089	.05887	.08088	.20423	.25881	.18913	.04728	.08348	.11485	.07417	-.08232	.04388	.18903
V090	.10788	.23808	.31433	.08498	.44788	.02037	.10888	.07840	-.03243	.11068	.08228	.21887

	V077	V078	V079	V080	V081	V082	V083	V084	V085	V086	V087	V088
V077	1.00000											
V078	.48338	1.00000										
V079	.32184	.28844	1.00000									
V080	.07888	.13851	.47108	1.00000								
V081	-.02787	-.12218	.28222	.09858	1.00000							
V082	.31231	.14324	.27443	.21848	.32958	1.00000						
V083	.32881	.38822	.27887	.23112	.25174	.58387	1.00000					
V084	.51187	.82882	.21170	.10727	-.18978	.10880	.37081	1.00000				
V085	.32478	.12030	.21174	.13885	.18724	.33883	.38221	.35885	1.00000			
V086	.41848	.83828	.08848	.05788	.08488	.12891	.34042	.49948	.08048	1.00000		
V087	-.15318	-.04871	-.02317	.12844	.24597	.12018	.18180	-.01782	.31803	.10801	1.00000	
V088	.23088	.07080	.17878	-.11110	.30471	.10442	.14248	.13827	.18181	.32880	.38188	1.00000
V089	.07048	.10773	.07802	.03722	.23883	.18728	.11730	.14882	.30884	-.07408	.28288	.18238
V090	.03244	.07788	.27038	.07883	.33114	.14788	.14871	.22132	.38383	.08728	.12088	.18813

	V088	V090
V088	1.00000	
V090	.48322	1.00000

Evaluation of Variables in Factor Model

Norusis (1985) suggests that an evaluation should take place as to whether all variables should be included in the factor analysis model. He suggests a number of methods of evaluating this - by obtaining measures of sampling adequacy and examining communalities.

1. Measures of Sampling Adequacy - When this was examined, it was found that the variables to develop new interests or to learn new things and to get away from the family for awhile had measures of .47528 and .51225 respectively. These values were considered low in comparison to those of the other variables. Norusis (1985:130) states that one should "consider eliminating variables with small values for the measure of sampling adequacy."

2. Communality - Four variables were found to have low communalities in comparison to other variables. These were: because the organization's activities are related to other recreational activities I enjoy (.321), to help bring the family together more often (.393), to get away from the family for awhile (.350), and to develop new interests or to learn new things (.396). Norusis (1985) suggests that variables with low communalities should be eliminated from the data.

In the case of the factor analysis done for this study using six factors, most of the above noted variables were placed in an unclassified category since they had low loadings on the six factors (under .440). It was therefore felt that there was no need to eliminate them from the data. However, one of the variables - to get away from the family for awhile did show up in the six factors under Factor 3 - Competency / Self-fulfillment with a loading of .557. Based on its inappropriateness, both in terms of the above tests and its meaninglessness in the factor, it was decided that this variable should be dropped from this factor and placed in the unclassified category.

Evaluation of Number of Factors

When the initial factor extraction and rotation was done, ten factors were obtained with eigenvalues over 1.00. These ten factors explained 69.3 percent of the variance. Norusis (1985) cites Tucker, Koopman, and Linn (1969), who noted that when choosing the number of suitable factors for a factor extraction, merely choosing those over an eigenvalue of 1.00 is not always the best solution. An examination of the ten

factor solution showed this to be the case since a number of the factors could not be interpreted.

Norusis (1985) maintains that a graphic plot of the variance of the eigenvalues is a trustworthy technique to determine the appropriate number of factors. A scree plot generated by an SPSSx computer program (Figure 6) suggested a three factor solution. However, it was felt that the three factor solution did not explain enough of the variance (41.1 percent) and did not have enough factors to provide meaning to the data. The next appropriate steep break in the plot suggested a six factor solution. It was decided that this was the best compromise since it was the most readily interpretable while still obtaining a reasonably high percentage of variance (56.2 percent).

In order to test whether this six factor model was appropriate, a reproduced correlation matrix (Figure 7) was obtained (see Norusis, 1985:134 for an explanation of how this matrix determines the appropriateness of the model). The message below the matrix indicated that 42 percent of the residuals were greater than .05 in absolute value. This number was not considered large and therefore the six factor model was considered appropriate.

Figure 6

Scree Plot of Eigenvalues

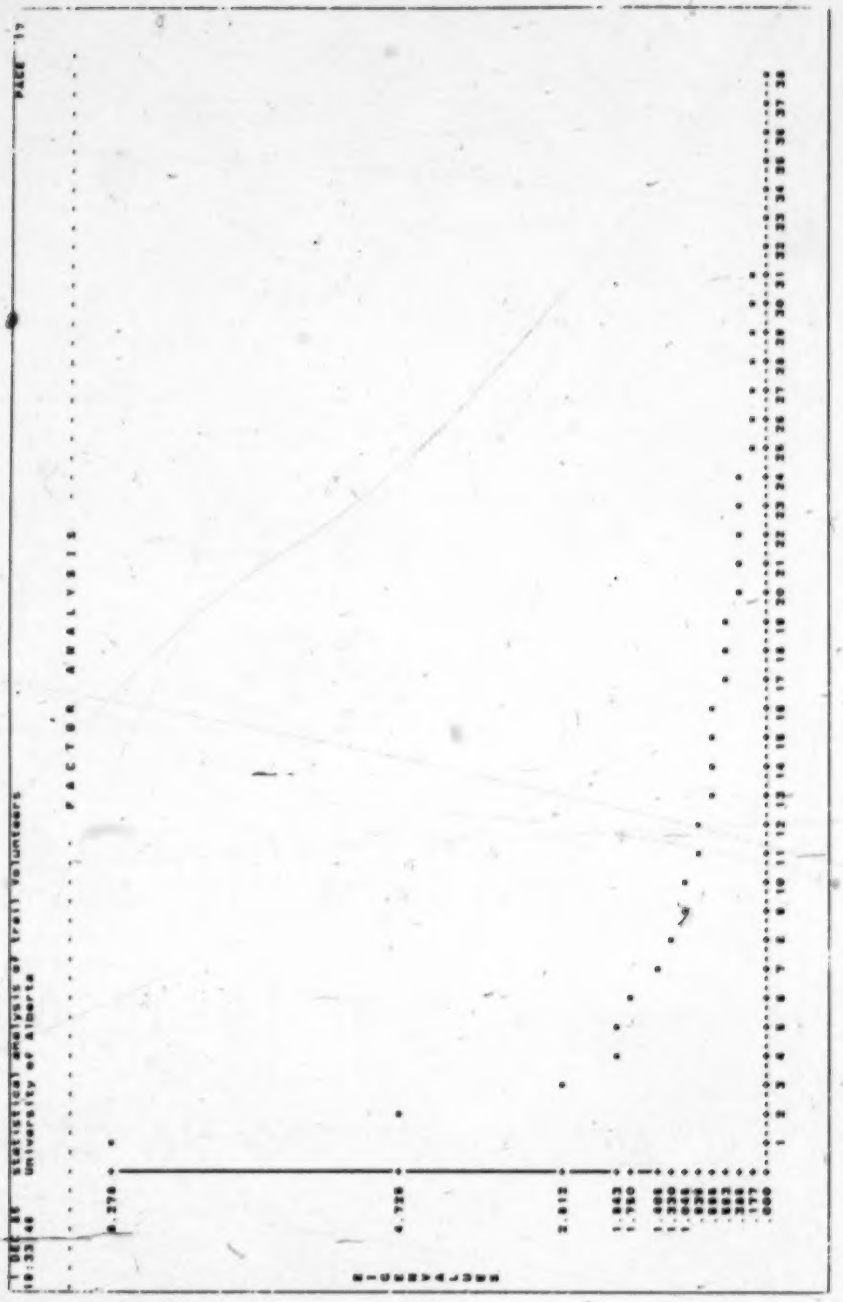

Figure 7

Reproduced Correlation Matrix of Six Factor Model

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FACTOR ANALYSIS

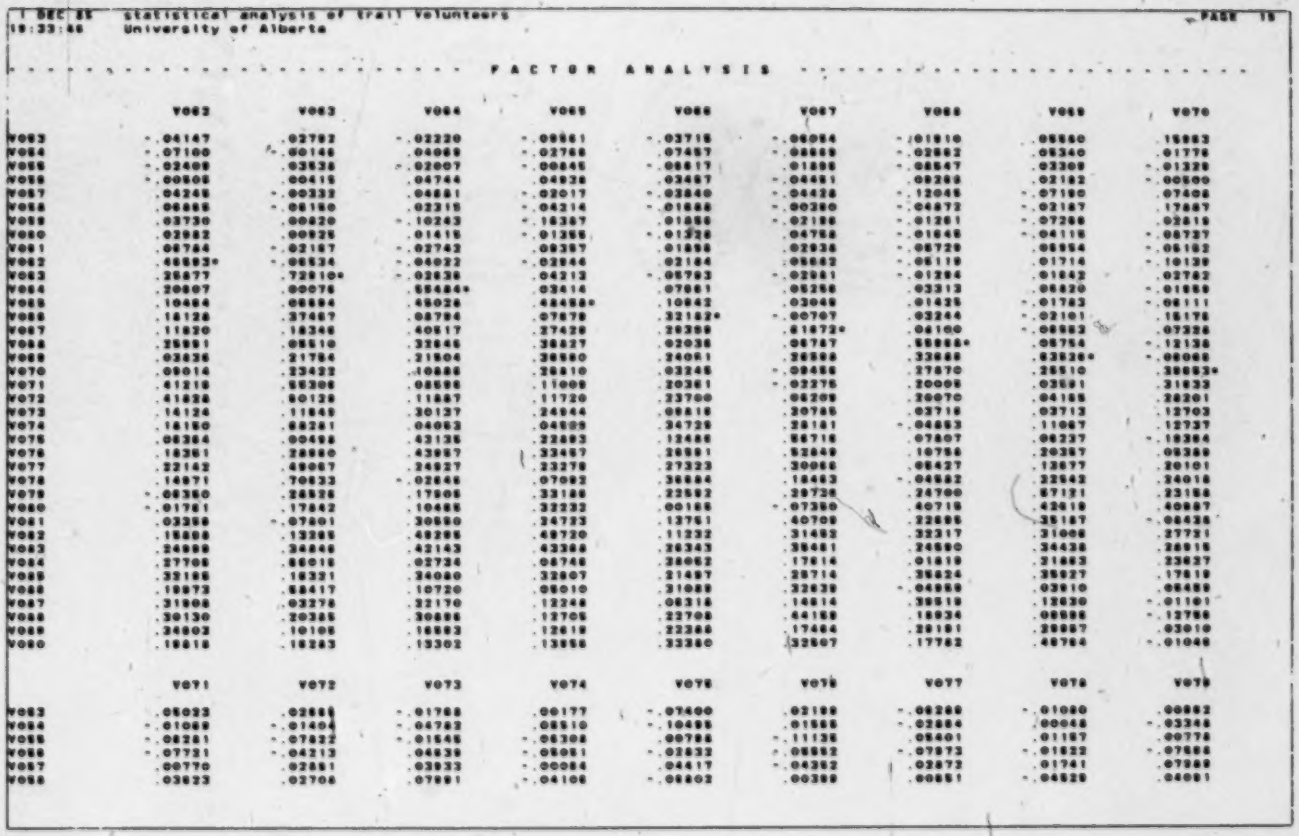
PC EXTRACTED 6 FACTORS.

REPRODUCED CORRELATION MATRIX:

	V053	V054	V055	V056	V057	V058	V059	V060	V061
V053	.50288*	.12006	.09458	.12278	-.05813	.04389	-.07848	-.05021	-.03582
V054	.17886	.47887*	-.01421	.07372	.07427	-.07336	-.04819	-.04037	-.04005
V055	-.03248	.19542	.39344*	.08164	-.05828	-.08820	.01442	-.08580	-.06117
V056	-.11487	-.17372	.21844	.55468*	.01128	.00545	.00183	-.08818	-.04320
V057	.08820	.01126	.25111	.20875	.49778*	-.03841	.10205	-.08468	-.07306
V058	.25068	.35740	.32075	.03203	.22130	.59540*	-.06378	.03588	.01338
V059	.28762	.41626	.16367	-.15515	-.08887	.46284	.58881*	-.00887	-.08361
V060	-.10885	.18338	.18686	.18086	.20092	.30731	.18389	.53452*	.04275
V061	.05852	.28003	.44704	.21882	.34880	.31820	.12884	.12988	.62079*
V062	.13363	.13828	.22417	.08028	.31012	.08806	-.07340	-.06744	.42879
V063	-.13288	-.08488	.33188	.59207	.46589	.06364	-.21487	.21806	.42111
V064	.25858	.46837	.16738	-.06770	.02186	.26463	.36826	.06780	.33251
V065	.06131	.37881	.10868	-.02386	.03381	.15075	.22672	.24462	.23328
V066	.18868	-.02836	.11021	.21661	.30289	.07863	-.06404	.06884	.20288
V067	.40638	.28978	.18347	.16740	.18836	.35888	.37863	.11857	.25878
V068	.04361	.37618	.18383	-.13116	.21803	.24828	.14071	.26702	.31685
V069	.11864	.18388	.00120	.14643	.26864	.13334	.06288	.30268	.07468
V070	-.28738	.08870	.08084	.10817	.08278	-.10864	-.19868	.23864	.18863
V071	-.20817	.00684	.32483	.33037	.32411	-.05883	-.28108	.03838	.40721
V072	-.18850	.04738	.38788	.36377	.37887	-.06128	-.19804	.06106	.46866
V073	.08028	.13878	.06248	.06891	-.06146	.06204	.02744	-.10367	.18041
V074	-.06784	-.08017	.37881	.80806	.37285	.18802	-.06880	.20778	.42483
V075	.38088	.38360	.28228	.03784	.05117	.82288	.58144	.12828	.28868
V076	.23781	.28317	.24183	.23028	.14328	.28748	.28214	.10820	.37888
V077	.02808	.08148	.28721	.28178	.20088	.04483	-.01747	.08827	.39828
V078	-.18878	-.15493	.24882	.81878	.38038	-.03888	-.24241	.20027	.31138
V079	.03808	.15782	.08143	.28028	.33978	.21884	.12748	.48448	.08877
V080	-.24283	.18041	.11043	.07178	.14828	.08481	-.01081	.47248	.11818
V081	.38818	.28278	.02738	-.07387	.13487	.38848	.37484	.20488	.07183
V082	.07888	.37878	.13718	.02888	.02271	.10348	.18811	.18881	.38888
V083	.08188	.23387	.18817	.21884	.18488	.02228	.03387	.11888	.38847
V084	-.08821	-.13388	.21288	.82888	.28238	-.08881	-.28888	.08188	.34811
V085	.22248	.23381	.07887	.00742	.24888	.09388	.03818	.07387	.27882
V086	-.00844	.01728	.38278	.81828	.32884	.21888	.03883	.14388	.43888
V087	.22888	.30211	.24188	-.11488	.30844	.40288	.22847	.13878	.34881
V088	.38878	.28382	.31838	.11782	.31828	.47882	.33413	.08811	.42888
V089	.30888	.08858	.08282	-.04248	.32788	.08782	-.08828	-.02124	.18881
V090	.37811	.03888	-.07717	.08788	.34828	.08742	-.03888	.07381	.08117

Figure 7

Reproduced Correlation Matrix of Six Factor Model
(Cont.)



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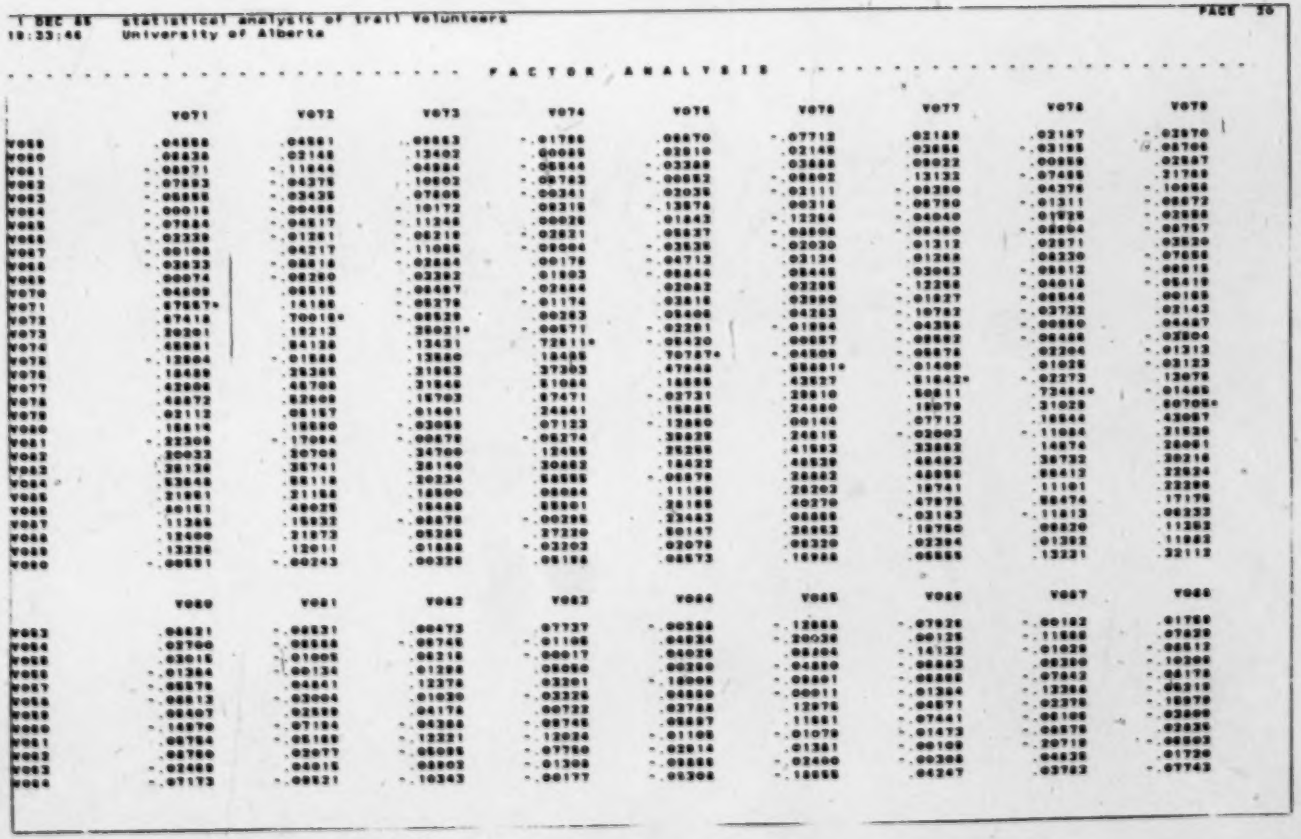
FACTOR ANALYSIS

	V062	V063	V064	V065	V066	V067	V068	V069	V070
V062	-.04167	.02782	-.03220	-.09861	-.03718	-.06084	-.01810	.05860	.15883
V064	-.07100	.00146	.04068	-.02768	.07487	.08858	-.02862	.06340	.01778
V065	-.02408	.03526	-.02007	-.00845	-.08817	.01888	-.08547	.03308	-.01328
V066	-.00508	.00415	.04744	.04826	.03487	-.04481	.08288	.02182	-.00500
V067	.04246	-.00333	.04881	-.02017	-.03840	-.04428	-.12048	-.07180	.07406
V068	.06865	-.06180	.02315	-.04214	-.01888	-.00280	-.04872	-.02147	.17887
V069	.03730	.00620	-.10263	-.16367	.01888	-.02188	-.01261	-.07268	.02818
V070	.02882	.00925	.01415	-.01355	-.01328	.04788	-.01648	-.04118	-.00727
V061	.06744	-.02187	-.02742	.08387	.01888	.02838	.08729	.08854	-.05182
V062	.46883*	-.06524	-.04022	-.02846	.02184	.05862	-.05119	.01714	-.10139
V063	.26877	.72810*	-.02838	.04213	-.05783	-.02881	-.01284	.01842	.02782
V064	.20807	.00076	.55484*	.03414	.07881	.05258	.03313	.05820	-.01889
V065	.10484	.06894	.45028	.44488*	.10842	.03048	.01425	-.01763	-.06111
V066	.16128	.37487	.06784	.07878	.32182*	-.00707	.03244	-.02101	.15178
V067	.11820	.16346	.40517	.27428	.20388	.61872*	.04100	-.08882	.07226
V068	.25881	.06510	.32846	.36827	.02038	.06767	.58884*	.06754	-.12138
V069	.03636	.21784	.21804	.36880	.24081	.26588	.33868	.63826*	-.08068
V070	.09014	.23422	.10886	.26810	.03248	-.09456	.27870	.25510	.38683*
V071	.61218	.58306	.06598	.11008	.20361	-.02275	.20008	.03681	.31833
V072	.61828	.60128	.11887	.11720	.23700	.06209	.20070	.04186	.28201
V073	.14124	.11848	.30127	.24844	.08818	.20745	.03718	.03713	.12703
V074	.16180	.68281	.04083	.04809	.34729	.28161	-.04863	.11067	.12737
V075	.06364	.00498	.43136	.22883	.12488	.86718	.07807	.06237	-.10384
V076	.16361	.28880	.43987	.33487	.26981	.52849	.10756	.20367	.09389
V077	.22142	.49067	.24927	.23278	.27323	.30068	.08427	.13877	.20101
V078	.14871	.70833	-.02846	.07082	.36884	.18463	-.04582	.22542	.24018
V079	-.06360	.26826	.17806	.33188	.22582	.28728	.24700	.87121	.23188
V080	-.01761	.17842	.10488	.32232	.00188	-.07380	.40718	.42618	.40887
V061	.03388	-.07801	.30880	.24723	.13761	.40708	.22888	.25187	-.08438
V062	.18888	.13288	.48288	.48720	.11232	.31482	.32317	.31008	.27731
V063	.24888	.34848	.42143	.43388	.26343	.38481	.24880	.34438	.28818
V064	.27708	.88018	.02734	.08748	.28062	.17818	.01818	.21883	.23827
V065	.32188	.18321	.34080	.32807	.21487	.28718	.38824	.35827	.17818
V066	.18973	.58417	.10720	.08010	.31088	.32838	-.04988	.03810	.08488
V067	.31808	.03278	.32170	.12248	.08318	.14814	.38818	.18280	-.01101
V068	.30130	.20388	.30888	.12708	.22708	.64188	.18934	.08888	-.12788
V069	.24802	.10108	.16882	.12618	.22388	.17484	.28181	.28887	.03010
V070	.18818	.18283	.13302	.13858	.32380	.32807	.17782	.48784	-.01048

	V071	V072	V073	V074	V075	V076	V077	V078	V079
V062	.05023	.02888	-.01788	.00177	-.07400	.02188	-.08288	-.01080	.00882
V064	-.01068	-.01404	-.04782	.08518	-.10488	.01588	-.02884	.00048	-.02348
V065	-.08281	-.07822	-.01548	-.06308	.00788	-.11138	.08401	.01187	.00778
V066	-.07721	-.04213	.04838	-.08081	-.02832	-.08882	-.07873	-.01822	-.07888
V067	.00770	.02881	.03833	-.00084	.04417	-.04382	.02872	.01741	.07888
V068	.03823	.02708	.07881	-.04108	-.08802	.00388	.00881	-.04528	.04081

Figure 7

Reproduced Correlation Matrix of Six Factor Model
(Cont.)



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	V071	V072	V073	V074	V075	V076	V077	V078	V079
V058	.04888	.04581	.08883	-.01788	.08870	-.07712	.02188	.02187	-.02870
V060	.08838	.02148	.13402	.00085	.02810	.02148	.03886	-.03198	.08708
V061	-.08971	-.11844	.04884	-.08844	-.03288	.03888	.09022	.00858	.02807
V062	-.07883	-.04375	.10802	-.08783	-.00882	-.08802	.13132	-.07488	.31788
V063	-.08888	-.03438	.07808	-.00341	.02038	-.02111	-.08380	.04278	-.10888
V064	-.00018	-.00488	-.10172	.08318	-.13878	.00318	-.08780	-.01311	-.08872
V065	-.07884	-.04817	-.11248	.00028	.01843	-.12884	-.04840	.01888	-.02888
V066	-.02338	-.01281	-.08218	-.02831	.05837	.08888	-.08480	.08884	-.08787
V067	-.00108	.04217	-.11088	-.08884	-.03838	-.02038	.01313	.02871	.03820
V068	-.03833	-.08818	-.02884	.00178	-.04713	.03134	.01288	.04238	-.07888
V069	.00074	-.08280	.02382	-.01883	-.08844	.08848	.03083	-.08812	-.08818
V070	.04888	.08818	-.08487	-.02884	.02882	.02388	-.12288	-.04018	-.08418
V071	.87887*	.14188	-.08278	-.01174	.03818	.08888	-.01827	-.08844	.00188
V072	.87418	.70018*	-.08828	.00283	.08488	.04283	-.10782	-.03732	.02143
V073	.38281	.18213	.38031*	-.08871	-.02281	-.01884	-.04388	-.08888	.02143
V074	.48881	.84128	.13431	.72811*	-.08428	.08887	-.08882	-.08874	.02804
V075	-.13884	-.01888	.13880	.18488	.70787*	-.04888	-.08878	.02284	-.01313
V076	.18488	.38388	.31883	.37385	.47848	.88881*	-.01488	.01028	.03123
V077	.42888	.48788	.31848	.81884	.14888	.43827	.81842*	-.02273	.13878
V078	.48872	.82888	.18783	.87471	-.02731	.28818	.80811	.72484*	-.01488
V079	.02112	.08187	.01481	.24841	.18888	.24888	.18878	.31028	.88788*
V080	.18818	.18888	-.03888	.07123	-.12888	.00184	.07712	.18844	.43887
V081	-.32388	-.17884	-.08878	.08274	.38828	.24818	-.02883	-.11884	.31838
V082	.38833	.38788	.34788	.12488	.35288	.41883	.33882	.14874	.38881
V083	.38138	.38741	.38148	.38882	.18422	.48838	.48483	.38732	.38218
V084	.83848	.88118	.38238	.88888	-.08878	.28882	.48888	.88412	.33824
V085	.31881	.31188	.18888	.88884	.11188	.28283	.18741	.11181	.33288
V086	.88181	.48828	.18488	.88881	.28188	.48278	.47878	.88474	.17178
V087	.11388	.18832	-.08878	.88288	.23483	.88888	-.83183	-.11813	.88233
V088	.12488	.21873	.88288	.27238	.88147	.28883	.18788	.88828	.11283
V089	.13228	.12811	.81888	-.83283	.82878	.88328	.82384	.81382	.11883
V090	-.88881	-.88243	.88328	.88188	.88873	.18888	.88888	.13231	.32112

	V080	V081	V082	V083	V084	V085	V086	V087	V088
V083	.88821	-.88831	.88473	.87727	-.88388	-.12888	-.87828	-.88182	.81788
V084	.83788	-.88888	-.88748	-.81188	.84838	-.28838	-.88128	-.11888	.87828
V085	.83815	-.81885	.84218	-.88817	.84828	.88284	-.14132	-.81828	-.88112
V086	-.81384	-.88134	.81288	.88888	.88288	.84888	-.88863	.88388	-.18288
V087	-.88878	.84841	.12378	.83281	-.18888	-.88881	-.88888	-.87842	-.88178
V088	-.88813	-.83884	.81838	-.83328	.84888	-.88811	-.81384	-.12388	-.88218
V089	.88487	-.82588	.84178	.88722	.82788	.12878	-.84871	-.82278	-.18878
V090	-.14878	-.87184	-.84388	-.88748	.88837	.11881	-.87441	-.88188	-.83888
V081	.88784	-.85188	-.12321	-.12838	-.81188	-.81878	-.81473	-.88878	.82838
V082	.88788	-.83877	-.88885	-.87788	-.82814	-.81381	-.88188	-.28718	-.88883
V083	-.82488	-.88815	-.88883	-.81388	-.88888	-.82488	-.88388	-.84838	.81728
V084	-.87173	-.88821	-.18343	-.88177	-.81388	-.18888	.84247	.83782	-.87743

Figure 7

Reproduced Correlation Matrix of Six Factor Model
(Cont.)

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	V080	V081	V082	V083	V084	V085	V086	V087	V088
V085	-.14618	-.03229	-.11101	-.08038	-.03468	.08827	.01667	.00927	.10784
V086	.01830	-.04504	-.10160	.04840	-.00367	-.00831	-.01187	.04388	-.02898
V087	-.03030	-.10480	-.11888	-.03863	-.01988	.00004	.00098	-.03325	-.07828
V088	-.09336	-.04336	-.12488	-.00416	.08314	.01788	.08818	.05444	.01887
V089	-.03160	-.08870	-.08837	-.08578	.02728	-.08176	.01776	-.02311	.11848
V070	-.08488	-.05478	.01118	.05184	-.08023	-.12418	-.08137	-.02334	-.02072
V071	-.03825	.10778	-.00387	.02303	-.01784	-.08488	-.02833	-.08315	-.00302
V072	-.00880	.07228	.08188	.03802	-.08878	-.08988	-.04811	-.05487	-.03828
V073	.08881	.02705	-.06393	-.17730	.04103	.04748	-.08470	-.00381	.03788
V074	-.01034	-.02437	.02721	.02134	.00823	.02472	.01182	.04052	.07839
V075	.01208	-.01388	.08238	.04807	.00784	.12328	-.08217	.03248	-.08888
V076	.07278	-.07833	-.04761	-.10138	-.04310	-.11928	.00533	.05438	-.00275
V077	-.00147	-.00788	-.02830	-.13802	.02231	.02738	-.08328	-.12133	.03318
V078	-.02883	-.01133	-.00280	.02880	-.03820	.00928	-.02848	.07142	-.02728
V078	.04082	-.02308	-.00818	-.02858	-.01384	-.01122	-.07828	-.08880	.08828
V080	.88874*	.02003	-.04048	.02845	-.00181	-.03183	.07282	.02487	-.02171
V081	.07888	.48180*	.13877	.11272	-.07184	-.06332	.07710	-.02188	-.01728
V082	.28888	.19280	.84888*	.04701	-.06822	-.00371	.00088	.04288	-.04022
V083	.30288	.13802	.81888	.88882*	-.02918	-.00848	.08388	.14888	-.03088
V084	.10818	-.08782	.17812	.40888	.88787*	.13280	.00812	.02882	.01271
V085	.18738	.28088	.36284	.38187	.22278	.44788*	-.00888	.05848	-.03888
V086	-.01488	-.01282	.13834	.28883	.48338	.06044	.82811*	.06248	-.00274
V087	.10087	.28782	.07730	.03470	-.04438	.25888	.04281	.81431*	-.02777
V088	-.08838	.32208	.14484	.17343	.12887	.23078	.32884	.38938	.88721*
V089	.03888	.28073	.10878	.18088	.18908	.40888	-.02883	.33288	.35183
V090	.08208	.37888	.10788	.22832	.22328	.38534	.02578	.21088	.24040

	V088	V090
V083	-.07732	-.08328
V084	.08818	.01028
V085	.02018	.08434
V086	.04481	-.12340
V087	.00488	-.02648
V088	.01118	.03204
V089	.04820	.08183
V090	.08781	.03588
V081	.01418	.01084
V082	-.11840	-.08880
V083	.08427	-.02880
V084	-.01802	.08472
V085	-.08782	-.03187
V086	-.14220	-.08874
V087	.02888	-.01074
V088	-.03800	-.11283
V089	-.11044	-.01878
V070	.01714	.03083

Figure 7

Reproduced Correlation Matrix of Six Factor Model
(Cont.)

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- - - - - - - - - - - - - - - - - - - - - - - - - - F A C T O R   A N A L Y S I S - - - - - - - - - - - - - - - - - - - - - - - - - -

                  V088          V090

V071           -.08878        .11278
V072           -.00818        .08083
V073            .05829       -.03870
V074           -.05028        .05889
V075            .02310        .00647
V076            .09883        .04598
V077            .04884       -.02311
V078            .09381       -.08488
V079           -.04480       -.05074
V080           -.00278        .03676
V081           -.02120       -.04543
V082            .07881        .03886
V083           -.07338       -.07881
V084           -.01243       -.00198
V085           -.10804       -.01142
V086           -.04448        .03181
V087           -.03890       -.08888
V088           -.08867       -.04527
V089            .52487*      -.04807
V090            .50838        .65860*

THE LOWER LEFT TRIANGLE CONTAINS THE REPRODUCED CORRELATION MATRIX;  THE
DIAGONAL, COMMUNALITIES; AND THE UPPER RIGHT TRIANGLE, RESIDUALS BETWEEN
THE OBSERVED CORRELATIONS AND THE REPRODUCED CORRELATIONS.

THERE ARE  200 (42.0%) RESIDUALS (ABOVE DIAGONAL) THAT ARE > 0.05


VARIMAX   ROTATION  1  FOR EXTRACTION  1  IN ANALYSIS  1 - KAISER NORMALIZATION.

  VARIMAX CONVERGED IN    11 ITERATIONS.
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Appendix D - Complete Listing of Factor Loadings

Appendix D

Table 44

Complete Listing of Factor Loadings

Reasons	Factor 1 Outdoor Recreation	Factor 2 Preservation/ Altruism	Factor 3 Competency/ Self-Fulfill.	Factor 4 Social Affil.	Factor 5 Service Recog.	Factor 6 Relat. to Work
Outdoors/Nature	.832	.138	.041	.060	-.060	.072
Phys. Exertion	.823	-.136	.101	.155	.054	-.032
Keep Healthy	.812	-.078	.037	.157	.090	.173
Relaxation	.735	-.006	-.053	.091	.021	-.112
Aesthetics/Solitude	.735	.248	.081	-.046	-.079	.107
Escape - Urban	.733	-.213	.181	.039	.200	.103
Confidence Outdoors	.611	-.137	.194	.034	-.076	.513
Different from Work	.575	.055	.420	.007	-.022	.078
Backcountry Experience	.538	-.280	.225	.024	-.057	.503
Feel Obligation	.428	.070	-.167	.170	.359	.352
Recreation Related	.426	.080	.076	-.001	.358	.000
Preserve - Fut. Gen.	.084	.802	.227	-.075	.021	.005
Preserve - Posterity	-.206	.717	.144	.095	-.097	-.018
Nat./Historical Concern	.054	.693	-.107	.202	.025	.251
Project Worthwhile	.261	.579	.330	-.029	.313	-.108
Provide Rec. for Others	.224	.574	.040	-.091	.230	.339
Feel Needed	-.132	.493	.093	.206	.411	.033
Lead Others	-.191	.426	.367	.217	-.028	.275
Learn Capabilities	.071	.139	.672	.249	.056	.093
Self Fulfillment	.331	.022	.643	.156	.201	.084
Solve Problems	-.059	.380	.594	.088	.105	.188
Escape Family	.146	-.016	.557	-.136	-.014	-.007
Use Skills	-.027	.163	.553	.368	.094	.085
Adventure	.364	.417	.490	-.015	.113	.005
Meet New People	.034	-.127	.114	.740	-.030	.133
Friends in Org.	.163	.221	-.059	.674	-.038	.014
Comradeship	.251	.188	.122	.626	.266	-.176
Belonging to Group	.114	.054	.192	.584	.484	-.080
Learn New Things	.139	-.297	.286	.421	-.068	.159
Feel Appreciated	.098	.078	.028	.107	.793	-.001
Status to Belong	-.023	-.007	.062	.010	.842	.330
Public Duty	-.131	.441	.090	-.240	.475	-.005
Obtain Respect	.049	.029	.369	.140	.458	.281
Primitive Lifestyle	.403	.245	.259	.039	-.023	.574
Similar to Work	-.094	.328	-.084	.116	.233	.568
Equiv. to Job in Area	.192	-.016	.178	-.154	.243	.560
Career Contacts	-.147	.083	.228	.453	.166	.496
Family Togetherness	.353	.279	.034	.099	-.183	.382